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# AMERICAN CHILD HEALTH ASSOCIATION

## FOURTH ANNUAL MEETING TRANSACTIONS

Washington, D. C., May 9 to 11, 1927

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MONDAY, MAY 9

*Opening Session*

*Presiding:* THOMAS D. WOOD, M.D., Professor of Health Education,  
Teachers College, Columbia University; Vice-President, American  
Child Health Association

Child Health and the Federation of Labor

WILLIAM GREEN, President of the American Federation of Labor

What the American Child Health Association Is Doing

SAMUEL J. CRUMBINE, M.D., General Executive, American Child  
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# American Child Health Association

## Fourth Annual Meeting

THE Fourth Annual Meeting of the American Child Health Association was held in Washington, D. C., with Doctor Wood, Vice-President, in the chair. In opening the meeting Doctor Wood said: "The stage is set for the Fourth Annual Meeting of this Association, with the Hamlet of the play absent. With another suggestion of history, our President and leader, like Cincinnatus of old, has been called from his more regular duties of the present to act in the great emergency caused by the flood. Mr. Hoover has been for some time in the South giving the direction, as personal representative of the President of the United States, to the flood situation. Hence, with our regret is mingled our pride that we have a leader who is capable of such a variety of great national and world services.

The first number on the program will be the address by Mr. Green.

## CHILD HEALTH AND THE FEDERATION OF LABOR

WILLIAM GREEN,

*President of the American Federation of Labor*

TWO of the greatest sources of happiness are found in labor and children. The worker who is happy at his task and the child who is happy at his play form perfect expressions of human advancement. The most priceless possession of the worker is his children, and his toil and service is given that he may provide for them and care for them as they should be cared for. This love and care for his children prompts him to make many sacrifices and aids him when he is sore pressed with the adversity of industrial conflict. To him his cause is a just and worthy one.

The purpose and program of the American Child Health Association so truly embodies the aims and purpose of the organized labor

movement in its concern for the children of our land that we can, with great consistency, associate ourselves with you in your work. Your endeavor to insure to every child a physical, mental and spiritual excellence which will enable it to receive correct instruction, the exuberance of health and the stamina of true spiritual culture makes your work of untold importance to our nation and to humanity.

The care of children and the preservation and promotion of child health appeals to humanity's noblest sentiments. The deep interest which has been aroused among all classes of people in the subject of child health is an evidence of the growing importance attached to this great subject. Science and education have done much to develop public opinion and to inspire organized forces to engage in child health research and to find protective measures. Opposition to efforts which may be exercised is inconceivable. Failure to do our full duty in promoting and protecting the health of children is due to indifference, ignorance or selfishness.

The membership of the American Federation of Labor, in common with all American citizens, is interested in the welfare, the happiness and the health of all children. This interest is inspired by patriotic and humane reasons. The American Federation of Labor, however, has a particular and special interest in the question of child welfare. From the beginning of its existence in 1881 it has emphasized the necessity of affording protection to children and it has consistently pointed out the destructive effects of child labor.

Children who live in favorable circumstances may be given the care and attention necessary to the protection of health. They are reared in a healthy environment and enjoy the privileges of healthful surroundings. Their opportunities for development and growth into strong, vigorous men and women are greater than those of the less fortunate who are numbered among the great mass of working people.

It is because the workers who are represented by the American Federation of Labor are deeply conscious of this fact that they are eager to utilize every means available for the prevention of sickness and death among the children and to favor legislation which will operate to spread knowledge and education regarding the adoption of methods which will safeguard the health and the lives of children.

In order to supply the protection which must be accorded children, if their lives are to be saved, we must understand the underlying causes of sickness and the high mortality among children. These causes as they exist among the mass of the people are varied but easily ascertainable. Some may be classified as economic and others may be classified as physical. Some are directly traceable to a lack of knowledge and understanding of the use of preventive measures.

Poverty is the primary cause of much human distress and is a prolific source of ill-health among children. The child that is underfed and undernourished falls an easy prey to sickness and disease. The devitalizing effect of a lack of wholesome food is quite noticeable upon the faces and in the general appearance of thousands of children who attend our public schools. Many teachers and many who are employed as community nurses can bear testimony to this fact. We cannot have strong, vigorous, healthy children in any community where poverty lays its blighting hand upon family life or exacts its tragic tribute from those who dwell within the home.

It may be impossible to abolish poverty or to overcome all of its disastrous effects. It is a condition of our social life which is predicated upon numerous and various facts and causes. But we can greatly reduce and minimize its scope and effect. Certainly we ought to find a way by which the nation's children may be spared the deadly and harrowing experience which attends hunger and emaciation.

In searching for a remedy for poverty we must first definitely decide to face existing facts and diligently apply ourselves to a study of the basic causes which produce it. For instance, the breadwinner must be accorded an opportunity to work and earn a wage sufficiently high to provide adequate food and clothing for his dependent children. This involves a study and understanding of industrial and economic facts with reference to family needs, the family budget, adequate income and the problem of seasonal and intermittent employment, as well as unemployment.

The most serious of all our industrial problems is that of unemployment. It quickly and seriously affects home life, living conditions and the minimum food requirements of the wage earner's family. The ill effect of prolonged unemployment in any community composed largely of working people is first apparent among their children.

General debility, loss of weight and a perceptible increase in sickness among the children inevitably follow in the wake of unemployment. The pathetic feature of it all is that innocent children are the victims of a false and unsound economic condition for which they are in no way responsible. They go hungry in a land of plenty and they virtually starve in their dwelling places surrounded by an abundance of food supplies.

In the promotion of child health we must grapple with this depressing, difficult problem of unemployment. Success in this laudable endeavor depends upon our ability to find a remedy. We must find a way by which we can systematize and regularize employment so that wage earners may earn a steady, uninterrupted income sufficient to supply an adequate amount of wholesome food to their children. These efforts should be supplemented by the adoption of a practical plan providing for the creation of a joint fund out of which sums could be paid sufficient to tide the workers and their families over unavoidable, intermittent periods of unemployment in seasonal callings and industries.

Workmen's compensation laws are serving to advance and promote the health and welfare of children. Under the operation of this humane legislation definite sums of money are automatically paid injured workers and the dependents of those killed during the course of employment. By this process the dependents of injured workers are assured food and care during the period of incapacity resulting from an industrial accident and the dependents of killed employees are accorded care, food, education and protection until the dependent children reach the age where they can care for themselves. We can render a very great service in the advancement of child welfare and child health by strengthening and perfecting the workmen's compensation laws in the different states so that they will be more responsive to human needs and will more adequately meet our social and family requirements.

Legislation prohibiting the employment of children in industrial establishments has served to protect their health, morals and physical well-being but this character of legislation, helpful as it is, affording a large measure of protection to the nation's children, does not effec-

tively and adequately meet the needs of modern society. Altogether too many children of a tender age are employed in industry.

During the period since the Supreme Court of the United States declared the last federal child labor law unconstitutional the employment of children has increased until now it is authoritatively estimated that more than two million children between the ages of ten and fifteen years and at least two million five hundred thousand children between the ages of ten and sixteen years are working for wages.

According to a report made by the Federal Children's Bureau, in January of this year, the increase in the employment of children in industry in one city alone, Fall River, Massachusetts, was 43.7 per cent. If the nation is to be completely saved from the degrading and destroying effect of child labor it must adopt the child labor amendment to the Constitution of the United States. In no other way can we fully and successfully cope with this evil.

Child labor is a national problem requiring the application of a national solution. It should be dealt with through the enactment of uniform legislation and this can only be done through the exercise of constitutional authority conferred upon the Congress of the United States. Time and opportunity will not permit more than this passing reference to the proposed child labor amendment to the fundamental law of the land. It is an issue which must be faced if the organizations interested in the promotion of child welfare and child health are to succeed.

The nation cannot possess healthy children, in a full and complete degree, and at the same time permit industry to employ children. We cannot have child health and child labor simultaneously. The employment of children in industry is a curse to civilization. It is incompatible with child welfare and is a violation of natural and physical laws. We must surrender one or the other, children's health or children's labor. Which shall it be?

The national security and the preservation of the Republic require that the health and welfare of our children—not the children in one state or a group of states alone but the children of all the states throughout the Union—shall be protected and preserved. In addition to the whole-hearted support which the American Federation of Labor



has ever given to workmen's compensation and child labor legislation it has led in the movement for the enactment of compulsory school attendance laws and has supported recreational and playground movements.

The hundreds of city central bodies and state federations of labor chartered by the American Federation of Labor take an active interest in educational, playground and recreational movements. All of this contributes to the promotion of child welfare and child health. The American Federation of Labor approved and supported federal legislation creating the Children's Bureau, the Women's Bureau and the Act for the promotion of the welfare and hygiene of maternity and infancy, commonly known as the Maternity Act.

The agencies created by this legislation have rendered and are now rendering most valuable service to mothers and children throughout the land. The information disseminated by these federal agencies concerning the care of children and infants enables mothers to administer to the need of their children and care for them in such a way as to protect and promote their health and welfare.

It is most regrettable to observe that the reactionary forces in the Congress of the United States who, during the last session of Congress, succeeded in their efforts to repeal the Maternity Act, extending help to mothers and babies, are now directing their efforts toward the destruction of the Children's Bureau. This group of reactionary members of Congress seem to be strongly against child welfare, mothers and babies. They profess to see in the development of these agencies a form of governmental bureaucracy which threatens the liberty of the people.

I seriously question their sincerity. They do not seem to fear that agencies created by the Federal Government for the purpose of assembling and disseminating information regarding the care and protection of animals and trees and the methods to be employed in destroying the corn borer and other pestiferous insects tends toward the establishment of bureaucratic control threatening the liberty and freedom of the people.

The working people of our country are strong supporters of the Department of Agriculture and the agencies created within it for the

purpose of helping the farmers of our country to better care for hogs and other animals but they are for the mothers and children of the nation first. We will vigorously oppose any and all attacks made upon the Children's Bureau and any attempts made to destroy it.

To have a nation strong and enduring we must have a nation of homes. We must have homes in houses and dwellings which permit sunlight and fresh air. We must have homes which harbor mothers whose children may receive their care. We must make it possible for fathers to win by their efforts a sustenance for their children and the women who have given them to this world.

To a worker home is a sacred place. He gives his entire life to hard labor so that he may maintain it and bring to its narrow confines the joy of happy childhood. These are facts which are proven by the lives and experiences of working men and women. It is to be deplored that these ideals have not been realized for years of ceaseless efforts have been expended by organized labor in its attempts to accomplish them.

Under the press of industrial expansion the change of living conditions and the increase in economic necessity many women are compelled to share with their husbands in the work of caring for their families. Upon them is cast the burden of caring for home and children and performing work for wages. This work requires her to absent herself from her home during many hours of the day and deprives her children of the watchful care of their mother.

Childhood is such a charming subject. It is so filled with allurements that when we turn to thought of it we picture the chubby, red cheeks of a well-cared-for child. We have so many of them, each vying with his fellows for coveted prizes and health medals.

But organized labor sees the pale, wan faces of the under-nourished, uncared-for children. It comes in close contact with the child worker and its heart grieves when it sees and knows the great hardships which that child must bear. Our sympathy and our desire to alleviate their condition is deepest because we know what these frail children are facing day by day.

Be assured that the American Federation of Labor will coöperate with and assist the American Child Health Association in its work of promoting child health in every community throughout the land.

*Doctor Wood:* The next number on the program this morning is an address by the General Executive of our Association, Doctor Crumbine.

## WHAT THE AMERICAN CHILD HEALTH ASSOCIATION IS DOING

SAMUEL J. CRUMBINE, M.D.,  
*General Executive*

THE American Child Health Association has never harbored the delusion that it was the only agency responsible for leadership in promoting the cause of child health, or that it was the sole guardian and interpreter of the accumulating scientific achievement in the rapidly expanding field of health knowledge. No agency or group of agencies could possibly occupy such a position; the fund of health knowledge is too extensive and rapidly growing, and the field of child health work too diversified and ever-expanding to permit of such a possibility. What we covet, therefore, is the opportunity of securing productive coöperative service, when desirable and expedient, with the official agencies upon which government has placed the responsibility of advancing the cause of child health. It has also been our pleasure to join with other voluntary health agencies and with the great national social and civic groups in the fields of our common interest and endeavor. It is with this coöperative program in mind that the hopes and aspirations of the American Child Health Association may be more clearly defined and understood.

Years ago Disraeli declared that the first duty of a statesman was a concern for the public health, and the great Gladstone translated that concept into laws designed to protect and promote the public health of Great Britain. From that day to the present, no authoritative group of people has questioned the view that it is a function of government to protect and promote public health. In some states in our country this function has been written into the state constitution and in other states it has been assumed by legislative enactment. Yet notwithstanding this generally accepted view legislatures, as a rule, have been slow to assume their full responsibility in providing ade-

quate means and measures for safeguarding the public health. This is due to the fact that the affirmative action of government in public health must always be conditioned, in the main, upon the peoples' general level of intelligence regarding public and personal health.

It is right at this point that the voluntary health agencies find their greatest field of usefulness. They are a powerful factor in molding public opinion through education and demonstrations. They are pathfinders blazing the trail into new and unexplored fields; they are, or should be, "pinch hitters" in emergencies.

Official organizations must of necessity limit their activities to those projects which have general approval. The budget provides for these, but it rarely happens that funds or personnel are ample for the adequate solution of pressing and equally important problems, and it is even more infrequent that funds are available for pioneer work or research. Voluntary agencies on the other hand are relatively free from such inflexible laws or conditions as restrict the work of the official agencies, nor do they have to await favorable public opinion or the approval of political expediency. Thus voluntary agencies are able to pioneer in new fields which, if productive, prepare the way for the official agency to take over the project when public approval permits health practice to catch up with health knowledge.

It is, therefore, in the fields of survey, research, demonstration and interpretive promotion work that the American Child Health Association finds its greatest usefulness. Considered in their final and more practical aspects, projects of research and demonstration are essentially one with those of interpretation and promotion; indeed during the course of their development these projects usually partake of the characteristics of each, which, if carried forward to their final goal of applied knowledge in public health, may be properly considered as steps or phases in the progress of the work.

The nation-wide campaign for clean and safe milk may be used to illustrate the type of coöperative work between this Association and the official agencies embodying the three phases of survey—research, demonstration and interpretive promotion work, which seem to be productive of permanent and continuing results in means and measures for better milk control. After a working plan for a state survey has the joint approval of the State Department of Health, the State

Dairy Commissioner and the representative of the American Child Health Association, the work starts in the survey phase by securing a picture of the actual sanitary and chemical quality of the marketed milk in a cross section of the state together with definite first-hand knowledge of the problems associated with milk production and distribution. The project then enters the phase of demonstration when the experts in milk sanitation point out the defects in routine methods and equipment in milk production and distribution and offer suggestions for betterment. Finally comes the phase of interpretation and promotion when, through carefully planned follow-up of the survey, the results are interpreted to the various civic and social groups and the importance of milk in the dietary of the growing child is stressed.

Our educational workers proceed similarly with respect to the schools. They sample and analyze educational thought and practice relating to school health programs. They interpret, demonstrate and promote.

The work of the Health Education Division of this Association was founded on the faith that there exist in the schools of this nation, powerful forces for promoting the health of the child. The work is rooted in the conviction that, if there is to be education in health, the program which seeks to attain this end must be an integral part of the educational plan, that the responsibility for its development and operation must rest upon the schools and that the health practices and health knowledge, to be woven into the web and woof of child life and thought, must be in the hands of those skilled craftsmen in child training—the teachers.

To stimulate the schools to accept this responsibility, to assist them in analyzing their program, to aid them in solving their problems, our Association seeks to develop the best group thinking, to interpret and express this thought and to demonstrate and promote its application. As a concrete example of this may I illustrate by a brief description of the steps involved in our study of secondary school health programs which we have conducted recently.

Discussions in our health education conferences, one of the channels we have used for the crystallization and development of group thought, gave evidence that those working in secondary schools felt the need of a wider knowledge of the way in which others were meeting the

problems peculiar to children in this age group. Such data must come from the schools themselves. Therefore a study was organized under the leadership of the Health Education Division of this Association. In this study, fifty-two secondary public and private schools made a self-analysis of their program. Our staff assisted by offering a suggested outline in accordance with which to organize their investigation.

The reports made by these schools were critically studied and evaluated with the assistance of the specialists of national reputation serving on the Association's Technical Advisory Committees. A special worker was sent by our Association to visit a selected group of the schools who not only surveyed the programs from the outside point of view but also offered constructive suggestions on specific problems brought forward by the school faculties. This mass of material has been sifted and prepared in the form of a bulletin which presents to all the secondary schools of the country descriptions of problems in health education and the procedures which seemed to work best in meeting these problems. As a solution of some of the main difficulties discovered, an administrative plan is suggested which is already being worked out practically by the local school people in a big modern high school in the middle west.

Promotion began with the entrance of the schools into a study involving self-analysis. As a result, weaknesses were discovered, new light was let in and fresh viewpoints gained, and we now have word from many of these schools that their participation in the study meant a tremendous impetus in the development of their school health programs.

These two illustrations serve to show the type of projects undertaken by this Association and the care and thoroughness with which our professional staff approaches its work. Moreover, only those projects are undertaken, the promotion of which has more than local significance,—projects which are pioneer in character, or such as seem to lag because of lack of development in one or more of the phases mentioned.

Having explained the self-imposed limitations of the type and character of our work, and something of our technic, certain details remain to be commented upon. We hope and we believe that the Association is advancing the cause of child health by means of the

## 14 WHAT THE AMERICAN CHILD HEALTH ASSOCIATION IS DOING

following projects, some completed, others under way at the present time.

### ANNUAL MEETINGS

As this present occasion marks the Fourth Annual Meeting of the Association, permit me to mention the special importance of our Annual Meetings where the papers presented are usually of a high scientific order, often furnishing the latest reliable information or opinion on the subjects treated. The Transactions of these meetings are, in effect, year books noting the progress made in the various problems relating to child health. They are distributed widely, not alone to the Association's members, and are ranked as an important contribution to the cause of child health.

### SURVEY OF EIGHTY-SIX CITIES

Late in the year 1923, our president, Mr. Hoover, suggested that a fact finding survey be made of a group of American cities having a population of between 40,000 and 70,000, in order to determine what the child health needs were in each city and how effectively these needs were being met.

The outstanding facts revealed by the survey, as listed in the letter of transmittal in the published report, were as follows:

Each city was found to be carrying on some organized effort for bettering the health of children although the amount on the average is perhaps not over half of what is to be expected in a reasonable health program.

By utilizing the scientific knowledge now at hand it is possible, by better organization, to increase materially the health protection of children at no great increase in costs.

The greatest needs are, well-trained health officers devoting undivided attention to the task, standardization of methods, more thought in explaining health work to the public, and better team work among public and private health agencies.

A brief summary of the results of the survey is as follows:

Jointly with the American Public Health Association the first Appraisal Form was created, by which it is possible to evaluate, score and grade public health activities.

A report was published of the health activities of typical American cities having a population of 40,000 to 70,000. This included: A Proposed Plan of Organization of Community Health for a City of 50,000 Popu-

lation. This report has been distributed all over the world and is now being used as a text book by several of the great colleges and universities in the department of preventive medicine of their schools of medicine.

The follow-up work has resulted in a complete reorganization of a number of municipal departments of health and has been instrumental in bettering health conditions and health practices in many more.

It is my deliberate judgment that the "Health Survey of 86 Cities,"—cities having a population of 40,000 to 70,000, and the survey of eighty-three cities having a population of over 100,000 and the results <sup>1</sup> flowing therefrom have set forward public health practices at least a decade.

#### THE SCHOOL HEALTH STUDY

It is the purpose of our President, Executive Committee and Board of Directors that this organization shall serve as a clearing house of inquiry into and information about the problems which affect child health and, therefore, the health of the nation—in fact, to become more and more a research organization. Accordingly the next big research job, with which we are already engaged, is to weigh and measure the effectiveness of the health program in the schools of the country. Is this health program yielding results in healthy children and in habits and attitudes that build health potentialities for the future? This will be a field investigation attempting to secure more precise objective data which may be used to measure, in terms of health status, habits and knowledge of pupils, the effectiveness of existing school health activities.

#### CHILD HEALTH DEMONSTRATION IN MANSFIELD AND RICHLAND COUNTY, OHIO

This Demonstration is an example of effective coöperation between the American Red Cross which financed the Demonstration, the National Child Health Council and the American Child Health Association jointly exercising supervision and advisory control.

The increasing demand from health and social workers, educators and librarians for the clear and simple Report of this Demonstration warrants the statement that the work carried on there in Ohio has

<sup>1</sup> "Results of the Survey of 86 Cities" in the April, 1927, CHILD HEALTH BULLETIN, published by the American Child Health Association.



made an important contribution to the field of applied child health knowledge and practice.

#### EDUCATIONAL CONFERENCES

Since 1918, the Health Education Division has held five working conferences the purpose of each being to lead to the development of more richly conceived health education ideals and the beginning of what might be termed standard practices in school health work. To these conferences were brought representatives of different professional groups interested in health education programs. From each of these conferences has come a report which through wide distribution has proved a stepping stone to a higher level of practice. That these conferences are held in high esteem by educators is indicated by the fact that the last two were held in well known universities at the request of the university authorities.

Last but not least in results the Division of Health Education has assisted in the development of two international congresses on health education in connection with the World Federation of Education Associations and, on request, has acted as agent in editing, publishing, and distributing their proceedings.

#### STATISTICAL REPORT OF INFANT MORTALITY

This compilation, started by Doctor Van Ingen in 1916, becomes more complete each year as the size of our registration areas grow larger.

The infant mortality rate is one of the indices on which we depend for guidance in public health work, due recognition being made of other important influences. The trend of the infant death rate is considered a most valuable aid in health administration and a most useful stimulus to the self-measurement of communities' health activities.

There are several instances in which this Statistical Report of Infant Mortality was a chief factor in bringing about local health reorganizations, to the end that the communities' resources were brought to bear effectively on the relatively high infant mortality rate.

## ENLARGING THE BIRTH REGISTRATION AREA

For several years the Association loaned a birth registration expert to state departments of health to assist them to enter the birth registration area. Evidence is not lacking to show that this service was useful and highly appreciated by the state departments of health.

## MIDWIFE CONTROL

Similarly expert personnel was loaned to a number of state departments of health to institute demonstrations in negro midwife instruction and control. These demonstrations resulted in the working out of a plan which looks to the elimination of the utterly unfit midwife and to the training and licensing of those who give promise of profiting by instruction and supervision. This plan has been adopted as a state-wide policy and program in several of the southern states.

## MAY DAY — NATIONAL CHILD HEALTH DAY

May Day has secured for itself a prominent place on the calendar. The idea, born in 1924, seems to have a growing vitality, for now thousands of communities have with vigor undertaken the task of self-analysis, to the end that the community's resources may be more fully brought to bear upon their child health problems.

May Day is also a medium through which may be secured the active coöperation and participation of all agencies, official and unofficial, in a common program for advancing the cause of child health in every community. For May Day is something much more than a festival day. It stands rather for a day of beginning or point of departure for an all-year-round child health program, or it may be a day to celebrate progress in such a program. The May Day festival, therefore, is simply the symbol of the community's purposeful interest in the cause of child health in which every individual as well as every child may have a part.

Following the Association's policy of working through official agencies, state departments of health have been requested to nominate State May Day Chairmen. Accordingly all the states had chairmen this year and in 33 states the Director of the State Division of Child Hygiene assumed that important function.

The governors of 32 states voiced their approval of May Day by proclamation this year and the President of the United States has declared—"I am confident that the people of America will be glad to make May Day the occasion for rededicating themselves to the happy task of safeguarding our most precious asset—our thirty-five million children."

We have Arbor Day for promoting the culture of trees; why not May Day for promoting the culture of our children? We celebrate Columbus Day in commemoration of the discovery of America; why not May Day to discover anew the American Child? We have Independence Day to commemorate the Declaration of Independence; why not May Day to declare the Child's Bill of Rights? We have Memorial Day to mourn for our heroic dead; why not May Day to rejoice in the victorious and abundant life of America's future citizens? We have Labor Day to honor the dignity of labor; why not May Day to exalt the life of our children, potentially our greatest economic asset and the defensive strength of the nation?

May Day has arrived.

#### HEALTH EDUCATION LITERATURE

The high quality and character of the educational literature issued by the American Child Health Association has been a matter of justifiable pride, for there seems to be a general acknowledgment that our literature is second to none in the child health field. It may not be inappropriate to express modestly our gratification upon a recent public utterance by the Editor of the Journal of the American Medical Association, that our pamphlet on "The Baby in the House of Health" headed the list of 106 such pamphlets, "in soundness of scientific statement and attractiveness and effectiveness of presentation." Our policy of referring each manuscript, before publication, to our Technical Advisory Committees for critical review and constructive suggestion and approval, therefore, finds ample justification.

#### GRANTS MADE BY THE ASSOCIATION

In a few instances, the American Child Health Association has made a grant of money to develop a project which gave promise of

special significance and value, but which otherwise might have remained undeveloped indefinitely.

For example: A grant for the inauguration and maintenance by the Minnesota State Department of Health of a public health nursing service carried on by trained Indian nurses among the Chippewa Indians. This subsidy, granted on a fifty-fifty basis, continuing for a year and a half has resulted in a permanent Indian Health Service financed by the legislature of Minnesota.

An immediate demand for more Indian nurses followed the inauguration of the Indian public health nursing service. This demand has resulted in the establishment of a pre-nursing course in Haskell Institute, the great Indian college in Lawrence, Kansas. More than a score of Indian girls are now taking this course, and provision has been made for nurses' training in Anchor Hospital of St. Paul, Minnesota, where twelve Indian girls are now in training.

The demonstration of the utility and effectiveness of this service has carried across the borders of the state and now the great state of Wisconsin has made similar provision for the health of its Indian population.

This grant of money was wisely made for the Chippewas and wisely spent by the Minnesota State Department of Health and the accumulating results are of vast significance to the people formerly spoken of as a vanishing race.

A grant has also been made to the Joint Committee on Maternal Welfare, composed of the American Association of Obstetricians and Gynecologists, the American Gynecological Society and the American Child Health Association. This Committee attempts to get in touch with all the county, district and state medical societies in the United States with the idea of stimulating greater interest in improving the conditions surrounding maternity and early infancy.

Another grant was made for the purpose of a study of what constitutes health in the normal child, and what deviations from the supposed normal may be properly disregarded as being of no special significance as bearing on the health of the child.<sup>1</sup>

Still another grant has recently been made to assist in a problem in

<sup>1</sup> Signs of Health in Childhood, by Hugh Chaplin, M.D., and Edward Strecker, M.D. Published by the American Child Health Association. 25 cents.

medical research concerning childhood infection of tuberculosis in relation to the later clinical manifestation of the disease.

Grants have also been made in the form of fellowships and scholarships for the promotion of teacher training. While the concept of health education as an integrated part of the school curriculum is now accepted by leading educators, the classroom teacher and administrator often stand bewildered before the task of translating this ideal into a practice for which their professional training has failed to fit them. Training of teachers in the promotion of health, therefore, involves the improved training of the teachers-in-service as well as the influencing of those countless teachers-to-be who are still students in our normal schools and our universities.

By scholarships and fellowships this Association has endeavored to seek out promising material and by a carefully organized plan to make such selection as to give intensive training to those applicants who have already shown capacity and leadership in communities scattered geographically throughout the nation. An instance of the effectiveness of this type of grant is shown by the fact that the first holder of the first fellowship offered is now assisting as health education specialist of the National Catholic Welfare Conference in the development of the health education program in the parochial schools of the country.

Other projects, of less importance, and a daily routine of advisory consultive service of considerable magnitude, literally reaching almost every country in the world, add to the total growing volume of the activities of the American Child Health Association.

#### CONCLUSION

We expect and hope that the time will come when health knowledge will be so widely interpreted to the people and the promotion of health so efficiently carried on by the medical profession and health services of the government that there no longer shall be a productive field of operation for such an organization as the American Child Health Association. When that time does come, our President has assured us, we shall divert our resources and energies into other channels. While for some of us that joyous time seems far in the future to others the dawn of a new day is already discernible on the horizon.

*Chairman Wood:* Effective efforts in the formation of child health must obviously rest upon solid scientific foundations. There is, however, a great deal of beauty and much romance in some of the activities in this field, and I think that this is true of May Day, which seems to me to be a unique and a most interesting project in the program of the American Child Health Association.

“The Meaning of May Day” will be presented to us by Mrs. Root.

## THE MEANING OF MAY DAY

AIDA DE ACOSTA ROOT,

*Director, Division of Publications and Promotion, American Child Health Association*

AS our time is so short, and as Doctor Crumbine has so well explained to you the purpose of May Day, I have very little left to add.

May Day, I may say, has spread from North to South, from the East to the West, of this country, every State having its May Day chairman. I take this opportunity of congratulating the State Chairmen who are here for the very wonderful work that has been done in this country, and to tell them how thrilled I have been by the results they have sent in and by the fact that the American Child Health Association has been able in a small way to serve the nation.

I am going to have a few pictures shown here this morning of some of the various programs of last year that were carried out on May Day. Unfortunately, we cannot show any of this year's because, as you well realize, May the first was not so very long ago.

I want to ask Mrs. Walter McNab Miller to come forward and comment on these pictures as they are shown to you. She is well known by you all, and knows the country better than I do.

Mrs. Miller then spoke as follows:

In making the selection of pictures there are a few points which seem to stand out vividly: First, the national extent of the May Day celebration, carrying us from coast to coast and from Canada to the Gulf; second, the fact that highly sophisticated city groups equally with those of small unorganized rural districts are taking part in May

Day; and third, that from whatever part of the country the pictures come, the note of joy is evident.

The first picture thrown upon the screen goes out beyond America and strikes the chord which vibrates in harmony in every country under the sun. It is a cable from Elizabeth, Queen of the Belgians, rejoicing with us in our May Day celebration.

The next picture comes from South Dakota and touches a child health problem in some of our western and southwestern states, which many in the East do not understand. The band you see is composed of Indian boys, in native costume, bearing banners with health and safety slogans.

The scene changes to Florida. The first slide shows a May Day float filled with children and bearing legends such as "Health Fairies" and "Bargains in Health."

The next slide is a boy dressed as Uncle Sam—symbolic of the interest which the whole United States is taking in the May Day celebration—pulling a red, white and blue trimmed wagon in which sits the triumphant May Day queen.

Texas gives us the same story told in a different way—first, the royal float with the May Day queen and maids of honor; next, the crude old school house in which a negro child health conference is being held. The youngest in the picture is only five weeks old. Can one doubt what his physical future will be if the lessons here taught are followed?

The third, the king and queen of May with their attendants, in a May Day celebration at the entrance to the school. One of the posters which pleases the American Child Health Association especially is the one, "Give Us Pure Milk."

The next slide illustrates one way in which Vermont is utilizing the May Day idea. A certificate carrying the May Day Seal and signed by the Secretary of the State Board of Health goes to all the children who have been examined and found free from physical defects. This is done through the schools of the state.

Kentucky gives us our next pictures, and here we see not only the May Day parade but in the background the old Colonial buildings with the Colonial architecture of Grecian type so common to a certain period in our history.

The next slide, illustrating a totally different celebration—a scene in a rural town with a chubby boy astride a cow labeled “The Child’s Best Friend.” The man at the head of the cow is one of the directors of the Agricultural Extension Service which has given such great help in developing the May Day programs.

From Kentucky to the rock-rimmed hills of New Hampshire is rather a jump, but here are two slides of an entirely different character. First, the window display of the Board of Health, containing models and equipment for children, and many posters bearing health labels such as “Our America—Every Child Well-Born” and “May Day, Consecrated to the Health and Happiness of Children.”

The second New Hampshire slide shows a child health conference held on May 1st and continued at intervals throughout the year.

The next slides are from the open spaces of the Great Northwest—Montana. The first depicts a small rural school with children on the steps carrying signs complementing each other, such as, “Better Food,” “Here It Is”; “Better Children,” “Here We Are.”

The second, the May Pole with the children dancing—with the audience in the background gives evidence of the interest everywhere in the celebration of the day.

From the bleak but joyous May Day celebration in Montana the scene shifts to Georgia, with a gorgeous May Day pageant in the amphitheatre of the Georgia State College of Agriculture.

The second slide, also in Georgia, shows the May Day health parade in which the Tuberculosis Association proves its interest in child health by the many health crusaders joining in the parade.

From Michigan, we show a unique way in which the Department of Public Health in one town emphasized its interest and participation in the day—an invitation from the Department of Health for the children to visit clinics and to receive health examinations.

Back across the continent to Rhode Island, where one of the great features of the state work is the emphasis on the vital part that direct sun’s rays play in promoting sturdy growth in the child. The two slides show the sunshine babies and suggest a valuable therapeutic agency too little used by the mass of the people.

Pennsylvania shows first a May Day pageant and celebration at the Carnegie Steel Plant in Duquesne, and second an invitation from the



Director of Child Hygiene in Philadelphia to a large luncheon at which different phases of child health were to be discussed. The various ways in which the May Day idea is being used in the states show not only what a flexible instrument May Day is but the more important fact that it belongs to the states to be interpreted according to their own needs, the idea being merely sponsored and stimulated by the American Child Health Association.

From Connecticut comes an interesting suggestion, the picture of a May Day tag, a half million of which were slipped over milk bottles for May Day. It bears the slogan of the May Day seal, "The Health of the Children is the Strength of the Nation."

The Ohio slide is most interesting. May Day was chosen as a day on which to close the Mansfield Child Health Demonstration, which is already a nationally known experiment. This day was considered of such importance that our slide shows the reviewing stand where the Governor of the State of Ohio, the Director of the State Department of Health, the Vice-Chairman of the Red Cross, the Director of the Child Health Demonstration, and others are shown reviewing the 3,600 Mansfield Blue Ribbon Children. It is our regret that we cannot show you these children, but the importance of the event is indicated by the notables reviewing the parade.

We are able to show two of this year's pictures from New York. The first, a scene in Central Park, with the Queen of May, her attendants, and a band.

The second, the Chief of the Division of Child Hygiene of the City Board of Health, crowning the May Day Queen.

The two slides from the District of Columbia show the First Lady of the Land receiving a May Day basket from three youngsters at the White House door last year, and the same gracious, charming lady showed her interest in the celebration of the day by receiving the children again this year.

*Chairman Wood:* In connection with May Day, we have this very interesting coöperation between the American Child Health Association and the state departments of health in various states, and I am going to ask for brief and informal accounts to be given by some of the representatives of the state departments who are here this morning. Will Doctor Davis speak for his state?

## MAY DAY IN DELAWARE

ARTHUR T. DAVIS, M.D.,

*Executive Secretary, Delaware State Board of Health*

A VITAL piece of work in which the American Child Health Association has coöperated with us in Delaware has been the milk survey carried out throughout our entire State.

We have in the State of Delaware one city of over 100,000 inhabitants, all the rest of our incorporated towns, of which there are about seventy, averaging no higher than 6,000 in population. In no town in the State was there ever any milk survey work done prior to 1924, with the exception of one, and that is the town where the State university is situated. At that time Delaware had the highest infant mortality in the United States, and that did not make us feel very comfortable.

In preparation for this statewide study we made a careful survey of all the sources from which milk was delivered locally, by our own division of sanitation, which had been started only the February before.

As a result of that survey we found that the places from which milk was being sold were very dirty. No work had been done, the men themselves had no realization of the work that ought to be done in order to produce clean milk, and we started in bettering those conditions.

The following July Doctor Crumbine sent his laboratory down to us, and we made two complete surveys of the milk of every locality in the State of Delaware. We found that our milk bacteria count averaged more than a half million, that almost without exception it was dirty, that 60 per cent of it showed contamination with colon bacillus. Since that time we have twice yearly made a complete survey of our state, and we have dropped from over 500,000 bacteria count, so that our last figure was about 80,000, and our milk is wholly clean at this time.

Again, we have had practically every herd from which raw milk is sold in the state tuberculin tested as a result of that survey. Now only eight or ten herds have not been tested, and they are merely waiting for the state department of agriculture to finish their work.

That has not been the only result. Our infant death rate has dropped from 104 per thousand to 89, and we hope that our 1926 rate will be less. We attribute a great deal of that to the work that has been done in our state.

There is another side of this question which I think we have demonstrated, that is, the fact of this work being tremendously popular with the public. It helps your other work. If anybody starts to knock, somebody is sure to refer to the good work done in cleaning up the milk supply.

This year we had a statewide campaign for the prevention of diphtheria. In some schools we had 100 per cent taking treatments, and in none less than fifty, and we attribute part of their response to the ground work laid during our milk supply survey and follow-up.

I want to take this opportunity to publicly thank Doctor Crumbine and the American Child Health Association for what they did for us.

*Chairman Wood:* Will Doctor Chesley speak for Minnesota?

## MAY DAY IN MINNESOTA

A. J. CHESLEY, M.D.

*Secretary and Executive Officer, Department of Health, Minnesota*

IN BEHALF of the children of Minnesota I want to add a word of tribute to the work of the American Child Health Association. While over 100 communities in Minnesota have model milk ordinances, without adequate funds only piecemeal work could be carried on by the State Department of Health. Two things had to be done in order to launch a comprehensive state wide campaign for milk sanitation. First the Legislature had to be convinced that the State Health Department needed money for milk sanitation.

Mrs. Miller, representing the American Child Health Association, and Mrs. Daniel Coonan, the State Public Welfare Department Director of the Federated Women's Clubs, had a great deal to do with the constructive propaganda which was largely responsible for creating the favorable public sentiment needed to secure the \$5,000 a year from the Legislature. The second and more difficult part was to con-

vince the Governor to leave the appropriation in the Board's budget after the Legislature granted it. Mrs. Coonan did that.

Doctor Crumbine visited the Indian country and saw the deplorable unsanitary conditions which surround the Indian children. He wired the American Child Health Association requesting that \$3,000 be given to the State Department of Health. This gift enabled the Department to get a similar amount under the Sheppard-Towner Act and to establish a Chippewa Indian Nursing service. About 13,000 Chippewa Indians live in Minnesota. Over 10,000 are citizens of the State. These Indians in some ways are not our best citizens, and they do have one common failing. You may recall, from your reading of history, that many white children taken as captives by the Indians were adopted into the tribes, and preferred their adopted parents to their white parents. Why was that? It was because the Indians were naturally kind to children and considerate of them. That trait is as strong to-day as it was in colonial days. But the Indians have not the knowledge or the means to give their children what they need for health and development. The Indian Nursing Service gives them the information and shows them the way to provide the means, and they follow eagerly. Not only the women come and bring their children, but the men come to the baby clinics, and follow the nurses' advice. The nurses have great influence. They work even with the medicine men. They understand the tribal customs. They know when to stay out, which is probably one of the most important things making for their success. It was also Doctor Crumbine's idea that Indian girls be trained as nurses in order to continue this Service. That Indian Nursing Service would not have been established to this day except for the aid granted at Doctor Crumbine's suggestion.

Doctor Crumbine did not refer to the establishment of a sanatorium for the treatment of Chippewa Indians who have tuberculosis. Nearly all the patients that come to the sanatorium are children. The willingness to send their young children who are sick to the sanatorium for treatment shows the confidence the parents have in the Indian nurses. The people of Minnesota are deeply grateful to the American Child Health Association for that assistance.

## MAY DAY IN INDIANA

ADA E. SCHWEITZER, M.D.,

*Director of the Division of Infant and Child Hygiene, Department of Health*

THE Indiana Child Hygiene Division has tried to fit the Child Health Day program into the year-round program. A few illustrations of how some communities are trying to accomplish this may be of interest.

In Fort Wayne for a number of years we had examinations of preschool children in coöperation with practically every organization of that city. This year the Preschool Study Club and others, the Medical and Dental Societies, the Public Health Nursing Organization made a specialty of the May Day program, and examined 566 children. The results of the examinations will be followed by the public health nurses, and by other groups, so that it will mean better health not only for the children of the city, but of the county.

In Evansville there was a 100 per cent registration of the parent-teachers associations, which included the examination of preschool children for the May Day programs. I do not know whether they will examine 100 per cent of the children but they are going to do their best. They, too, are coöperating with every other organization in the city.

There were paid dentists who went into the schools of the city and county and gave talks on dental hygiene. They have had dental examinations as a part of the oral hygiene program.

Dr. Mary Westfall, of Indianapolis, who is chairman of the State Dental Association Educational Committee, has given oral hygiene talks, and examinations have been made by dentists in the regional societies as part of the May Day program. These examinations have been carried on for thousands of children throughout the state by local dentists from their regional societies.

In the Calumet district, in the steel mill towns, spectacular beauty has been a feature of the programs.

In Whiting the winding of nine May poles by sixteen girls from each school followed immediately a mammoth parade of thousands of school children in costume from different schools throughout the city,

including the parochial schools. A large number of the children had been examined by physicians and dentists. They had motion picture programs, showing a number of health films. Similar programs have been carried on in various towns.

In Mishawaka, the Chamber of Commerce sponsored the May Day examination of babies.

In Indianapolis, I think every one of the social organizations participated in the May Day program and demonstrated its possibilities as a child health promoting agency.

During the past year I have had the privilege of teaching three classes of teachers in health education work. In one county the May Day program was a culmination of the health educational work as carried on by the County Tuberculosis Association, the county nurse, and by the county superintendent, in which all the schools of that county participated. One superintendent has been promoting health education and posture improvement by offering prizes for teams giving the best demonstration of health exercises. That county had a parade of children of the county, and a program given before 700 people in the gymnasium of their central high school.

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## MONDAY

### *Afternoon Session*

*Presiding:* MISS GRACE ABBOTT, Chief of the Children's Bureau,  
United States Department of Labor

#### Child Health in the Past

PHILIP VAN INGEN, M.D., Clinical Professor of the Diseases of  
Children, Columbia University

#### Child Health, an Actual Factor in Relief Work

BAILEY B. BURRITT, General Director of the New York Association  
for Improving the Condition of the Poor

#### Health Education and the Nurse

MISS MABELLE S. WELSH, R.N., Associate Director of the East  
Harlem Nursing and Health Demonstration

#### Health Education and the Pre-School Child

MISS EDNA N. WHITE, Director of the Merrill-Palmer School

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## MONDAY AFTERNOON SESSION

THE session was called to order at two o'clock by the presiding officer, Miss Grace Abbott, Chief of the Children's Bureau, United States Department of Labor.

Miss Abbott said: We have a very full and interesting program for this afternoon. Among those who have been steadily at work on the problem of reducing infant mortality and improving child health and have been giving very freely of their time in aid of these things, has always been Dr. Van Ingen, giving freely a great amount of his information and experience to anyone who came along and was in need of it. Dr. Van Ingen is going to talk on "Child Health in the Past." There is, after all, the necessity of looking backwards as well as forward, and his identification with the organized effort for improving child health makes it peculiarly fitting that he should open this discussion. Dr. Van Ingen:

## CHILD HEALTH WORK IN THE PAST

PHILIP VAN INGEN, M.D.,

*Clinical Professor, Diseases of Children, Columbia University*

AT THE suggestion of our President, this meeting of the American Child Health Association is to consider:

How far have we come?

What have we accomplished?

What is our next step?

The all-wise Program Committee has decided that a brief outline of Child Health Work in the past would be a suitable background—a sort of dark, gloomy curtain, as it were, to make our present activities stand out. I have been ordered to present the gloom. We are apt to feel that it was only in the past, the dim past, that things were very bad.

I have nothing new to offer. Twice the subject has been presented before the ancestors of this Association, in the form of a presidential address in 1913 by the late Doctor Holt, and in 1921 by Doctor Shaw. I can only hope to recall certain things which in the ever changing, ever widening field of our activities may have slipped

your minds. In the intensity of our work we are all too prone to scorn the views and proposals of those who 100 to 150 years ago were aware of the importance of Child Health to the Nation, who spoke and wrote to a selfish, unfeeling public, for many years without effect.

The beginnings of child health work occurred in Europe, almost all of them, or at any rate were suggested there before we started to carry them out. Being a nation which works hard and fast when we once do get started, we soon forget the past.

And yet, if we look hard enough, we can find much wisdom—which we might have listened to with advantage. There is a little book with a long title, called “A Cursory Inquiry into Some of the Principal Causes of Mortality Among Children with a View to Assist in Ameliorating the State of the Rising Generation in Health, Morals, and Happiness, to which is added an Account of the Universal Dispensary for Sick Indigent Children,” by John Bunnell Davis, M.D. It was published in London in 1817. There are only 72 pages. But he urges practically everything we to-day are doing: the Prevention of Malnutrition and Disease through the Advice of Physicians and Hospitals; Popular Education of Parents; Teaching of Health Habits; Social Service; Mental Hygiene; Posture; Proper School Day; Convalescent Homes; Home Economics; Subsidies for Nursing Mothers; and Elimination of Patent Medicines. Let me just read you a fine polemic of his:

“That amphibious—that mongrel race of beings who prey upon the credulous and ignorant—those Herods who murder troops of children—those bold and unblushing speculators in human life, who boast their pretended remedies—their nostrums—their secrets—and their charm for all complaints, particularly for the diseases of infants, might murmur at the lessened sale of Duffy’s Elixir, their carminatives, their soothing syrups, their balsams of honey, and so forth, and so forth, and so let them.”

That was in 1817.

The earliest activities for the child in this country were aimed at his soul rather than his body. Practically all the little that was done was done by religious societies, and it was chiefly through orphan asylums and foundling institutions. As, the world over, the majority of the inmates died in infancy and early childhood, the early preparation for the hereafter was probably wise.

Interest in his education was the next phase, and this quickly became involved with the subject of child labor. Massachusetts has the honor of the first legislation relating to child labor. In 1826 a law was passed requiring that no child under fifteen should be employed in any manufacturing establishment unless he had attended some public or private school for at least three months the preceding year. In 1842 another law restricted the hours of labor for children under twelve to ten hours a day. Since 1904, when the National Child Labor Committee was formed, a constant warfare has been waged against child labor.

It is perhaps not strange that so early in our national history efforts should have been made to protect the working child, for in England, during the first half of the nineteenth century so great was the expansion of factories that terrible conditions developed. It took forty-five years of constant agitation to persuade Parliament to pass a ten-hour bill for child workers—and that in spite of the most startling evidence. It was shown that the Poor Law Authorities of one London parish made a bargain with a far-off Lancashire manufacturer to “hire” to him pauper children for his mills, but only on condition that for every 20 sound children, one idiot should be taken. One manufacturer who went into bankruptcy advertised as part of his property for sale a gang of pauper children.

An important event in the history of child health was the establishment in 1866 of the Society for the Prevention of Cruelty to Animals, modeled after an organization founded in England in 1823. I wonder how many of you remember the story of Mary Ellen. A mission worker in the slums of New York came upon a child who had been adopted at an early age by two drunken, disreputable individuals who were treating her with great cruelty. Being unable to get any action by appeals to the police, or any other authority, she finally went to the Society for the Prevention of Cruelty to Animals. This was a new and startling proposition. So the matter was referred to the learned legal counsel of the society, who after mature consideration decided “the child being an animal,” the society could act. In 1875 the Society for the Prevention of Cruelty to Children was established, of which Mary Ellen was the real, though uncredited, founder.

To-day we are deeply interested in mental hygiene. We are perhaps rather overrun with so-called psychoanalysts and mental hygienists. It is all a very important modern movement. The little that was done dealt with the child "criminal." In 1852 a Massachusetts law declared that for that hardened criminal—the truant from school—the county jail was an appropriate place of confinement, but humanely limited its term of incarceration to one year. The first children's court was established by Illinois in 1899—the dim past! Twenty years ago there was not a single child guidance clinic or anything of such a character in the country.

Interest in the infant—as far as his life was concerned—is one of our early activities. The first scientific discussion on infant mortality was at a meeting of the National Society for the Promotion of Social Sciences in Dublin in 1861. The causes of infant mortality were discussed. In 1871 the Social Science Association discussed it in Philadelphia, and in 1876 the first International Congress of Hygiene, at Brussels, emphasized the importance of instruction of parents, physicians and midwives in the care of infants.

For many years it was realized that there was an excessively high mortality among babies, especially in summer. In 1874, the New York City Board of Health issued a leaflet on Infant Care. In 1879 the State Legislature required the city to appropriate \$10,000 to pay a corps of physicians to visit the sick babies in the tenements. Just how many died per thousand born we did not know. It was not until 1906 when the Bureau of the Census (having been made permanent by the law of 1902) published the First Mortality Report for the years 1900–1904, that for any considerable part of the country we had accurate statistics. It had taken us a long time to appreciate the value of human bookkeeping.

In England, in 1538, Henry the VIII ordered the incumbent of every parish to keep a "tru and exact copy of all Christening, Weddings and Deaths." Perhaps as Henry was married so many times he felt the need of such records. They were not kept for long, however. Fairly complete records exist for Geneva since 1549. But we cannot learn very much from these old records. It is somewhat confusing, to say the least, to see such items as these published in

a Bill of Mortality for London for the week September 5-12, 1665, the year of the Plague:

Fever . . . . .	832
Grief . . . . .	3
Teeth . . . . .	128
Rising of the Light. . . . .	15
and Chrisoms . . . . .	20

This last strictly medical diagnosis signifies, "Death before Christening." But since 1812, England has had very complete registration of births, deaths and marriages. In 1900—as long ago as that— we had vital statistics—of deaths—for about 38 per cent of our population, and in 1915 for births among 31 per cent. Our Infant Mortality Rate in 1915 for this Birth Registration Area was 100, but in that same year the rate was as follows in certain foreign countries:

Denmark . . . . .	95
Ireland . . . . .	92
Switzerland . . . . .	90
Holland . . . . .	87
Union of South Africa. . . . .	86
Sweden . . . . .	76
Norway and Australia. . . . .	68
New Zealand . . . . .	50

In 1925 of the cities in the original Birth Registration Area of 1915, 90.7 per cent had an Infant Mortality Rate under 100, while in that year only 50.8 per cent were under 100.

It was early recognized that diarrhoeal disease played a tremendous part in our mortality among babies, especially among bottle babies. Milk in those days was anything you could persuade people was milk. In 1840 Robert Hartley showed that five-sixths of New York's milk supply came from cows stabled within the city. He described one barn owned by a neighboring distillery housing 2,000 cows. The cows never left the barn except to go to the slaughter house, when dying, or to the offal dump if they died too soon to be sold as meat. The condition of filth was unspeakable, the food entirely distillery waste, no hay or fresh food of any kind. The milking was done by tramps and hobos in return for the privilege of sleeping in

the barns. Stalls were rented for five dollars a year and "food" provided at nine cents a barrel. New York had a death rate of 25, of which deaths one-quarter were under one year, and over one-half under five years of age. Even 25 years ago much of New York City's milk had a bacterial count higher than ordinary sewage. And most other large cities were no better off.

The sickness and mortality among babies was so great during the summer 20 years ago that many cities had special open air hospitals. Milk was beginning to receive special attention and in many cities Milk Stations or Depots were established. Much money was spent in pasteurizing and modifying milk which was handed out in a formula suited to the age. The baby was rarely seen; there was no medical supervision, no instruction of the mother, no follow-up, and when summer was over most of the Stations closed. Such was our folly then. We failed to grasp the fact, as Doctor Caroline Hedger remarked, "Babies come separately. They can't be fed by the carload." Nor did we realize that Ignorance is the most important factor in Infant Mortality. Ignorance on the part of the mother and all too often on the part of the doctor. The modern idea of the Milk Station is the Health Center, and that is not 20 years old. In 1907 the Public Health and Marine Hospital Service was able to find but 143 Milk Stations in 20 cities, of which only 54 were open the year around. In five of these cities all the milk from the stations was pasteurized, in six part, and in nine none at all. In 14 of the 20 milk was modified to a set formula. To-day there are 41 cities we know of where 95 per cent of all milk is pasteurized. To-day we are told there are 11,500 Public Health Nurses,—20 years ago there were 900.

Prenatal Care as a factor in reducing Infant Mortality was practically unthought of 20 years ago. In 1908, the *Pediatric* Department of the New York Outdoor Medical Clinic undertook prenatal supervision and instruction of all women applying to the *Obstetric* Department for care. In 1909 the Committee on Infant Social Service of the Women's Municipal League of Boston carried out an experiment to try the effect of prenatal care and supervision, and in 1911 a broader campaign was carried out in New York. It was not until 1910 that the Census Bureau published any mortality statistics for ages during the first year of life. We knew a vast number of babies died from

Prematurity and Congenital Debility, but these figures now proved that 37 per cent of the Infant Mortality occurred during the first month. Slowly, very slowly, the Maternity Hospitals began to face the problem, notably in Boston and St. Louis. Doctor Holt's terse remark in 1912 was all too true. "In Maternity Hospitals infants are tolerated as one of the unavoidable incidents of Obstetric Practice."

To-day, as we look the situation over, we find everywhere governmental activity, national and local. Government is, and ought to be, so closely connected with the Child Health Movement it almost seems as if they always must have been. And yet the first City Division of Child Hygiene is not quite 19 years old—New York City established it in 1908. To-day every State in the Union has a Division of Child Hygiene or its equivalent, except alone Vermont. In 1913 New York State established the first,—14 years ago. The Public Health Service was the only National Governmental Agency interesting itself, even sporadically, in Child Health, until in 1912 the Federal Children's Bureau was established. In 1927 the National Treasury will provide \$1,141,000 for Child Health Activities. Twenty years ago it spent just—nothing. How is all this money from National, State and City funds being spent? We shall hear and see something about it during this meeting.

It would seem as if that tremendous organization, the Public School System, would have been a natural agency through which our attack on older children might have been made. Unfortunately, it has been the most unresponsive. Medical inspection in the schools was begun in 1892, if we may say it did then, for in that year New York City appointed a medical School Officer—ONE. In 1894, Boston provided 50 physicians, one for each school district, to detect communicable diseases. Chicago, not to be outdone, the following year divided the city into nine districts and appointed an inspector for each district for a similar purpose. As each district covered approximately 20 square miles, it is easy to imagine how complete the work must have been. In 1897, five years after the appointment of its lone Medical School Officer, New York City appointed 134 Medical Inspectors to visit each school daily, to exclude infectious diseases.

Connecticut made the first move to go further than exclusion of infection by requiring that every child in the Public Schools should



have his eyes examined during the fall term, and parents and guardians were to be informed in writing of the exact abnormal conditions. Another example of good intentions flavored with New England thrift, for all this was to be done by the superintendent, principal, or teacher in the school.

The first utilization of Trained Nurses in the schools was in New York City in 1902. In 1905 the same city inaugurated a system of examination of every child for uncorrected defects, just 22 years ago. In 1908 there had been established some system of so-called Medical Inspection in the cities of Massachusetts and in 70 other places. We have had 20 years to develop our Medical School Program. How far have we perfected it?

But all this was in a sense negative. We were trying to find things that were wrong already. We were not trying to build up a sound system of education of the individual in the habits of health. We were mopping up the floor, instead of repairing the leak. To be sure, in 1850 Massachusetts made the teaching of physiology compulsory in the elementary schools. Imagine how fascinating it must have been as taught in the elementary schools of that day. It was in 1904 that in Livingston County, Illinois, 3,000 children were organized as Open Air Crusaders, to develop habits of cleanliness, proper hours of sleep, prevention of infection, and so forth. But it was really not until the Great War that such procedures were generally adopted.

We are now well provided—perhaps overprovided—with health literature of the most attractive kind, constructed to suit the minds of human beings from infancy to old age. Have any of you ever read Doctor Chavasse's "Advice to a Mother"? Sixty years ago it was the "Best Seller" of its kind—because the only one. It was written in the popular Question-by-the-Mother,—answer-by-the-Doctor,—style, and began thus:

"Q. I wish to consult you on many subjects appertaining to the management and care of children. Will you favor me with your advice and counsel?"

"A. I shall be happy to accede to your request, and give you the fruits of my experience in the clearest manner I am able, and in the simplest language I can command, freed from all technicalities,"

and so on for a full page. Poor mothers!

We have been teaching mothers and even fathers to demand advice

as to how to keep their children well,—creating the demand. How far have we gone in providing the supply? When I graduated from the Medical School, except the barest fundamentals of care of infants, I was told nothing—and I learned little of that. I have begun to get a little sensitive in saying just when that was, since a group of medical students took their hats off to me on the street,—but it was in this Century, anyway—Just. And with practically no exception, I believe, the same condition existed in all the medical schools. The normal was only mentioned to bring out the abnormal. The physician was only concerned with, was the least bit interested in, his patients when they were sick. How far have we gone along these lines? How strongly are we impressing upon the physicians-in-the-making that their chief credit comes from keeping their patients well? That applies not to the surgeon, whose main object in life is to deprive us of something!

It is a difficult thing in a short paper to bring out all I should like. I have not done it well, but I have tried to bring up some conditions in the past and to impress upon you, by contrast, the tremendous increase in our activity, the more rational methods we think we have developed. The most striking thing to me in it all is how utterly stupid we were in not seeing how inadequate our methods were. Everyone seemed to be looking for one way to solve the problem. We failed to grasp the obvious fact that the road to Child Health was long and had many turnings, and that coördination and coöperation were essential to success. We thought once issuing modified pasteurized milk during the summer was going to make a big impression on the mortality of babies. That belonged to the last generation of young enthusiastic workers, and those of to-day laugh at it. We old fogies blush.

To-day we are beginning to realize the advantage of stock taking and of balancing our books. We welcome disinterested evaluation of our work. Twenty years ago we felt we must be right because we thought so. The City of Washington is to be congratulated that there is to be a social survey of its many health and welfare activities,—that the Capital of our country wants to know whether it is doing the best that can be done. In the discussions that come later in our meeting let us always keep in mind, “Is this really effective—are we really using every opportunity to do a complete job—will the next generation laugh, with reason, at us for being stupid?” Perhaps we shall find out we can do it more effectively. What is our next step?

*Miss Abbott:* In the next paper we turn from the past to a discussion of the question of child health as a factor in relief work. The New York Association for Improving the Condition of the Poor has always had a large viewpoint about what improving conditions meant, and the health of its clients and of the community as a whole has been an important part of its consideration. I am especially glad to have Mr. Burritt here this afternoon to talk to us on this subject.

## CHILD HEALTH, AN ACTUAL FACTOR IN RELIEF WORK

BAILEY B. BURRITT,

*General Director, New York Association for Improving the Condition of the Poor*

IN the last few minutes Doctor Van Ingen has been telling us of the great changes that have taken place, particularly in the last quarter of a century, in child health. If I could present in as few minutes the changes that have taken place in regard to the problems of dependency, it would be at least as striking as the changes in regard to child health which he calls to our attention. These problems are inextricably combined with child health and low incomes.

Nobody has pointed this out better than it has been done in publications of the Federal Children's Bureau. Anything that affects general welfare, and particularly anything that affects the health of the child, affects the problem of dependency. The more the health of children, and child health in general, is improved, the less dependency we have to deal with. The nature of the dependency that these organizations are dealing with in 1926 is so different from that in 1900, that it would be hardly recognized.

Out of my twenty years of experience in dealing with problems of dependency, I venture to state that if we could control the physical and the mental health of the child from the time of conception until adulthood, we should at the same time be controlling the major portion of dependency.

The major ills which cause so much of our sickness, poverty and distress during the adult life of the individual responsible for a family

have their origin all too frequently in a lack of early physical vigor or in the development of unhealthy attitudes of mind or habits of behavior in childhood. For these reasons child health must be the business of any organization which attempts to deal constructively with the problems of dependency and relief, and such organizations for the same reasons profit by any general movement favorably affecting general health.

#### HEALTH AS A FACTOR IN DEPENDENCY

Any careful examination of the situation of individuals and families coming to the attention of relief organizations discloses at once a fundamental correlation between sickness and poverty. Whether sickness be the cause of the poverty or inadequate wages the cause of both the poverty and the sickness, is relatively immaterial for the purposes of our immediate discussion. The fact that should be recognized is that sickness, distress and poverty are inextricably combined in by far the greater majority of family situations calling for relief.

A careful estimate made a few years ago by the organization with which I am identified disclosed the fact, for example, that at least one-half of all the expenditures for relief purposes arose in family situations in which a single disease, tuberculosis, was a factor. An examination of the problems presented and services rendered by family welfare organizations universally discloses the predominance of sickness, both physical and mental, as factors in their work.

It is difficult to attempt to reduce health problems in families to a statistical basis, but a careful examination of the health problems as distinguished from the social problems presented during the past three years in the Association for Improving the Condition of the Poor discloses a larger number of health problems per family than social problems, and a larger number of health services rendered by the organization than social services. This is not, however, a very adequate measure of the relative importance of these two factors. They are frequently inextricably combined and it frequently is not profitable or possible to separate them completely enough to warrant conclusive statements, but all the evidence discloses that lack of health is associated with dependency in at least two-thirds of the dependent family situations that family welfare organizations have to deal with.

Protracted ill health inevitably is accompanied by economic distress.

Remove the ill health by whatever method possible, and much poverty is controlled at its source.

#### TYPE OF RELIEF WORK ALREADY GREATLY MODIFIED

Progress already made in the control of preventable disease, such as tuberculosis, in the improvement of child health as measured by the reduction in child mortality and morbidity, and more especially by such measures of good health in children as are available, has already effected important modifications in the character of work possible in dealing with problems of dependency. Relief as a whole in 1900, as conducted by leading public and private family welfare organizations throughout the country, was casual, temporary, intermittent and ineffective, as compared with the work done by similar organizations in 1927. It is now inadequate in many particulars but it is far more adequate, in view of the tasks to be done, and in the volume of resources for undertaking these tasks than at the beginning of the century.

I may illustrate that by saying that when we had before us, as we had in 1900, such a mass of poverty, it made it very difficult to deal effectively with the resources available on an annual basis, which with our organization at that time was something like \$150,000 a year. Now, when a great deal of progress has been made in controlling much of the poverty at its source, there is available to our organization over a million dollars annually; and similar changes are true for most such organizations in New York City. While the volume of poverty has been cut down, the volume of the resources available to attack the problem has been going up.

The standing rules of the Relief Bureau of my own Association in 1900 excluded forms of relief other than temporary relief that would tide over critical family situations until some institutional solution could be found for the permanent problem. The institutional provision usually was a combination of the hospital or institution for dependent children, the institution for the aged, and a few other specialized institutions. The breaking up of the family unit was the rule rather than the exception where a relief program over several months and several years was involved. Now the maintenance of the home is the rule. This single change alone has meant much for the preservation of normal child life, physical, mental, moral and spiritual. Family

welfare organizations in 1927 do not hesitate to pay the price that is connected with several years of expenditure and supervision to tide over a family situation that has been threatened by chronic illness or death of the breadwinner until such period as the children themselves may become normal, healthy, productive members of society.

#### DEPENDENT CHILDREN SPECIAL HEALTH HAZARDS

It goes without saying that the children of dependent families are special health risks. These risks grow out of the lack of income of the parents from whatever cause their dependency has developed. They arise also in those families where one parent has chronic illness due to the fact that an abnormal strain is put upon the remaining parent which he or she frequently is unable fully to meet. These hazards, in short, arise from the chronic economic and physical handicaps connected with the cause of the dependency and operate, unless carefully counteracted, to endanger the health and full physical vigor of the children in such families. Such handicapping factors include inadequate housing because of inability to pay adequate rent; inadequate food supplies, because of inability to acquire the necessary food and also more frequently because of the ignorance existing with regard to expending such funds as are available for food most wisely, from the point of view of protecting the health of children. Lack of normal recreation opportunities for such children, the inability to procure prompt and adequate medical attention when needed, are further examples of the factors that make the children of dependent families special health risks.

I have here an illustration from the situation of a family that we have run across recently. It was the case of a Scotch father and mother—the father a stalwart man—and four children ranging in age from 10 months to 8 years. He had brought his bride to this country and had progressed very well in his trade. To be sure, they lived in a dark, poorly ventilated tenement, but they were thrifty, and were saving for better days, when they could move to better surroundings. Each addition to the family meant a bit more crowding, and when Mrs. Gordon's mother, who "wasn't very well," came to live with them, matters looked pretty bad. However, as she meant additional expense without additional income, they made the best of a bad situation.

They removed a cot, added a bed and put two of the kiddies to sleep with her. Little did they know that pulmonary tuberculosis had entered their home, until the acute condition of the older woman finally compelled the substitution of a physician for home remedies. The patient was cared for lovingly and soon died, but not until the entire Gordon family had become infected.

That is simply one illustration drawn from many in the health records showing what children undergo in many families.

Well rounded relief programs, therefore, must recognize the health of children in dependent families as an essential part of their program. Relief in money is frequently necessary over relatively long periods of time, but the important items which a relief organization must consider in such situations is the protection of the child from the effects of the factors which place him at a disadvantage so far as his physical and mental health are concerned. It becomes its function to see that the dependent child is housed in an adequate home, not too crowded for health, and with those minimum provisions of sanitation, light, ventilation and conveniences which place the child on a par with normal children in its opportunity to develop as children should.

The diet of the family must be a main consideration. In order to insure adequate nutrition of the child this is a matter not only of adequate funds to provide an adequate diet, but frequently that which is more difficult to provide, adequate knowledge and attention on the part of the parent which will make available the diet most suitable for the child's health and development. Attention to the development of suitable physical habits, such as sleep, regularity of times of eating, habits of cleanliness and of personal hygiene, are necessarily all a part of an adequate relief program for dependent families. If there be pregnancies in such families, it becomes the duty of the organization to see that the mother is suitably examined and suitably supervised during the pregnant period, so that the coming child, which is bound to have handicaps anyway because of factors causing dependency in the family, will be given the best possible start in life as a normal healthy baby and the future health of the mother may at the same time be safeguarded. Periodical medical examinations of the child, in order both to correct defects discovered and to anticipate the development of defects, is found in the program of progressive organizations dealing

with dependent family situations. Care of the teeth, because it is a relatively neglected factor in child development, is given consideration.

Careful attention to such details of child health in dealing with children in families who are at a disadvantage because of dependency can go far to remove the special health hazards which such children are subjected to. Indeed, the scrutiny of the physical condition of children who have been under the care of the better type of family welfare organizations, will disclose a group of children with quite normal physical and mental development, where such children have been under the continuous supervision of the organization for a considerable period of time. This is true to such an extent that it can safely be said that family welfare organizations have demonstrated that it is possible to remove the special health hazards and health disadvantages of children in dependent families and has made possible a development that compares quite favorably with the average child in the non-dependent family group.

At this point, I would like to read a very brief illustration from a report of one of the medical examiners in our organization who had made an examination of children in the widows' allowance group. He said:

"I have just completed examining all of the children in the widows' allowance group and I thought you would be interested in having a little preliminary report concerning the results of the examination. Of course, the nurse who assisted me will later turn in the detailed medical facts brought out by the examination. In general, however, I want to say now that I was most agreeably surprised and impressed with the physical condition of all members of these families. The development of the children, the excellent state of nutrition, surpasses that of any group of children I have ever examined, both in my clinic work and in my private practice. Further, the degree of corrective work which has been accomplished with these children during the past two and more years is most unusual. Most of the children I find have obtained normal development for their age and height, and in several instances the gains in both weight and general development I found to be in excess of those in normal healthy condition."

I cite that to show that it is quite possible to provide a type of treatment that will give such children practically the same advantage that normal children have.

Where one or both parents in a family have tuberculosis, the present and future health of the children is an objective quite as important as



the health of the patient or patients. It is furthermore frequently more possible to control. It does involve, however, an intimate supervision of the health of all of the family. The family is the unit which must be given consideration. There must, to be sure, be adequate material relief available to ensure an adequate home and a reasonable standard of living, but again the provision of money alone does not ensure healthful conditions. A great amount of time and infinite patience and tact must be used to safeguard the health of each member of the family. To do this frequently requires the removal of the family from the home in which it is found into a more suitable and less crowded home. Not only must the patient, under most conditions, have a separate room, but there must be an intimate supervision of the daily habits of the patient and of other members of the family. Painstaking medical examination, not only of the patient but of all members of the family, is an essential foundation without which no wise relief program can be planned or executed. Such an examination must not only precede the formulation of any adequate plans, but there must be sufficiently frequent reexamination of the patients to ensure their progress, and of the children and non-patients to protect them as fully as possible from the possibility of developing tuberculosis. Diet, cleanliness, suitable precautions of handling of food, necessary dental work, suitable out-of-door recreation for children, all of these and many other factors enter into adequate supervision of such family situations. The price of neglect of the more fundamental of these considerations is the probability of the development of tuberculosis in the second generation.

I cite again one other family situation to illustrate that one point, and the amount of service which was rendered in one family situation to perhaps illustrate it. The man died three months after his family came under our care, but the mother and four children were under care for six years. Eight outside institutions gave examinations, treatment or institutional care, totalling 36 health services; the Association for Improving the Condition of the Poor itself gave examinations at its clinics, dentistry, and so forth, totalling 63 health services, besides 30 country outings, and frequent consultations with the mother. Thus it may be said that 130 health services were rendered to this family of a tuberculous father to protect the adult life of the four children.

The experience of the Association for Improving the Condition of

the Poor indicates clearly that with adequate personnel and adequate resources the health of children in such families may be safeguarded. The conduct of the work of family welfare organizations in such a way as to guarantee this result is expensive, but not so expensive as the alternative program of work less well done. It is less expensive to care well for one generation of tuberculosis problems in a family than it is to care inadequately for the problem in a succession of generations.

Inasmuch as tuberculosis plays such a prominent part still in causing dependency, this must be given special emphasis in the consideration of child health problems as related to the work of family welfare organizations. How to conduct the work of such organizations in such a manner as to give the best possible assurance of recovery of existing cases of tuberculosis and at the same time guarantee against the development of tuberculosis in any well members of the family, but particularly the children in the family, is a goal which must be aimed at in the work of all relief or family welfare agencies.

#### CONTROL OF POVERTY THROUGH COMMUNITY-WIDE PREVENTIVE WORK

We have been dwelling thus far primarily upon the importance of the health of children in families actually dependent as a necessary part of the functions of progressive family welfare organization. Still greater responsibility and opportunity rests upon such organizations to stimulate and participate in community-wide child health preventive programs.

Nearly two decades ago the Association for Improving the Condition of the Poor created a committee to deal with milk standards. This was known as the New York Milk Committee. It had, at least subconsciously, in mind the fact that there was much unnecessary sickness, distress and attendant poverty, because of sickness and death of children, related to inadequately safeguarded milk supply. This Committee over a period of years did much to establish the present standards of safe milk in urban populations and as such had a very direct influence in the rapid reduction of infant mortality and morbidity, directly in New York City and indirectly in other cities. The Association also took an active leadership in dealing with the problem of suitable feeding of the young infant, and through the New York Milk Committee established a child health station for instruction in proper feeding of

infants. Out of this grew an active campaign looking toward the assumption of publicly supported authorities of the responsibility for such infant welfare stations to be conducted by the Health Department of the City of New York. It participated also in other ways in stimulating the demand on the part of the public in New York City for adequate funds to support additional child health stations. It was active also in assisting in securing the establishment of a separate bureau in the Department of Health to deal with problems of child health.

In 1926, in New York City, the lives of 38,000 children under five years of age were saved who would have died had the prevailing rates of two decades previous prevailed. This is a larger number of children than were found in all of the dependent families under the care of the Association in that year.

In other words, by assisting the development of a community-wide preventive program the Association feels that it contributed more to community welfare, community health, community freedom from unnecessary death and unnecessary sickness, distress and poverty than it could possibly have done had it devoted all of its energies and all of its resources directly to the problem of controlling situations in already dependent families. During these two decades the Association has been instrumental, we believe, in preventing more poverty than it has relieved during those years. This preventive program, while not exclusively a child health program, has been more definitely related to children than to the population as a whole, simply because childhood has been the age group during which preventive efforts are more possible and more productive.

It was with the same general purpose in mind that the Association developed a special Nutrition Department in its organization, the main purpose of which has been to deal aggressively with problems of nutrition among children. The work of this department has been focused upon prenatal nutritional education work, on the stimulation and development of adequate standards of infant feeding and also the importance of suitable nutrition during the preschool period. Upon adequate nutrition of children, the Association feels, depends in no small measure the future health of adults, and upon the health of adults dependency in no small measure rests. The nutrition program of the Association,

relating itself primarily to children, is conducted, therefore, practically as a means of preventing dependency through adequate knowledge and adequate practice of good nutrition.

The Association has conducted for a period of several years an extensive demonstration in dental work for children. Under the guidance of a committee consisting of dentists, physicians and social workers, it developed a preventive program for dealing with dental conditions among children. It showed over a period of years what types of dental work could most profitably be undertaken among children of different ages, what methods of getting dental work among such children actually done were feasible, and what the costs of doing such work were. It has thus supplemented its program of looking after the care of the teeth of individual children in dependent families under its care with a program aimed directly at stimulating the development of community facilities which will constructively look after the condition of the mouths of all the children in a community. Here again, the health of children, and the effect of this upon the reduction of the volume of distress and poverty, has been the objective of the Association.

The Association has also, during the past ten years, been conducting two intensive child welfare programs in local areas in New York City. One of these is known as Mulberry Health Center and the other as Columbus Hill Health Center. The first is conducted in an Italian section and the second in a section of the city inhabited almost exclusively by colored people. These have been over a period of years centers of educational work in the more congested sections of the city which are presenting many problems of dependency. The control of the health of children through intensive methods of education of parents and children and through the organization of such community facilities as will make possible the control of child health has been the outstanding aim. They have been centers, in other words, for the control of child health. They have been used not only for the effect of the results upon the immediate neighborhoods in which these health centers are located, but also for their influence upon the health of other children in the city of New York. The results of the work in these areas have been made available in several publications. The organization of these health centers has been followed by the organi-

zation of other health centers in New York City and by the development of child health demonstrations in other cities. My main purpose in referring to them here is to illustrate the fact that child health is the business of family welfare organizations—a very real actual factor in organizations dealing with problems of dependency.

Relief organizations must be concerned at once, therefore, with the health of children in particular families which have already become dependent. They must also, however, be concerned even more with the control of the health of children irrespective of economic conditions in such a way that unnecessary dependency, with all that it means in disadvantage to children, may be prevented before it occurs. Health activities affecting all ages are important from the point of view of prevention of poverty, but health activities for children still offer more possibilities of successful results than any other age group. May I conclude with the thought with which I began—the control of poverty through the control of the health of children is and must be a major objective of family welfare organizations. If we can preserve the health of our children until adulthood, we have gone a long way toward the control of poverty.

I have been very much interested in looking at the charts\* that have been presented around the walls of this room. It seems to me that they have this merit, that they present very simple truths, and present them so simply that we carry away a great deal from them. One of the charts, I think, on the opposite wall, points out the change that has taken place during the period that Doctor Van Ingen has been talking about, and that I have been talking about, during which there has been a very great increase in the wealth of the nation. The researches of the National Bureau of Economics and Research of the United States, in which they have brought this up more or less to date recently, indicated that there had been an increase, as I recall the figures, of 41 per cent in the average income, of incomes of the earning part of the population, from 1909 to 1925, inclusive—that not in terms of dollars and cents but in terms of ability of dollars and cents to purchase standard of living. In that factor alone I think we are finding the most profound changes affecting the things that Doctor Van Ingen and myself have both been talking about. Perhaps more than any

\* See page 363.

other one factor it has made the progress in child health and in dealing with problems of dependence, possible.

Add to this the influence exerted by such organizations as the American Child Health Association and other national, state, and local public and voluntary organizations, and we begin to glimpse the factors that have been effecting the profound changes in child health and general welfare.

*Miss Abbott:* There are some who do not understand why the social worker is interested in child health, nor why an interest in child health is a part of the job of a social worker, nor why it plays a very important part in the relief program, at least.

The next paper which we are to have is on the public health nurse. The chart\* that immediately confronts me on the opposite wall is the one showing that there were 900 public nurses in 1907 as compared with 11,500 in 1927, which is a cause of congratulation. Nevertheless, I want to say now that if anybody comes along 20 years from now and wants to know why I was pleased at seeing one nurse floating around over a whole county, and that bigger than the State of Rhode Island, or as big as the State of New Jersey, or something like that, I am prepared to say how ridiculous I knew I was, but how glad I was to see one nurse at least in that area as compared with none at all. The subject the next speaker, Miss Welsh, is to discuss, is health education and the public nurse. Miss Welsh.

## HEALTH EDUCATION AND THE NURSE

MABELLE S. WELSH, R.N.,

*Associate Director, East Harlem Nursing and Health Demonstration*

THE concept of health education, or education for healthful living, presupposes a standard or norm, a body of tested facts regarding the establishment and maintenance of the norm, a method or methods by means of which the facts may be disseminated—channels through which scientific truth may be distributed to the people in such a manner as to motivate for action.

\* See page 366.

1. What do we mean by health?
2. Have we a body of scientific knowledge regarding its establishment and maintenance?
3. How shall we best coördinate our scattered specialized efforts into a comprehensive program for health education—physical, mental and moral?

It is obvious that by normal health we cannot mean an ideal or maximum condition of well-being.

With scientific measurements we should expect to find any considerable group range itself in a fairly symmetrical curve. At the lower end we would find a comparatively small number of those whose health would be rated very poor; at the opposite end a group of similar size who would enjoy the maximum of health; in between would rise the peak of the normal or average, grading from fair to good and poor.

Individual differences must be reckoned with in physical health, as in intelligence, due to the same causes—hereditary and environmental.

Health education must concern itself with proper methods for imparting information to the large body of the normal or “mediocre” in health, the “gifted” or superiorly endowed, and the “subnormal” or markedly deficient.

The problem of health education is further complicated by the apparent rather close correlation of physical health and intelligence. Studies of the intellectually gifted offer evidence of the superior physical qualifications of this group, while all who work with the physically unfit find their problems tremendously increased by low intelligence.

In attacking the problem, we have at our command a rapidly increasing body of scientific knowledge regarding the human organism and its needs.

Human intelligence has demonstrated that it can emasculate the scourges that in the past not only wiped out vast numbers of the population but crippled many of the survivors whose descendants were thus enfeebled and made less fit for race propagation.

The human eye, aided by the high-powered microscope, has solved many of the riddles of disease and is constantly extending the frontiers of immunity. The same intensification of vision has enabled man to direct his gaze upon his own life processes, to understand the prin-

ciples and the machinery of heredity, to approach ever nearer the biological-chemical facts that underlie what we think of as positive or ideal health.

We are then on the way to a better understanding of "health" as a positive good. We have a vast body of specialized scientific knowledge regarding the origin and development of life, of nutrition, disease prevention, and mental health. To raise the level of normal health, to encourage the propagation of the most fit, and to make life yield all that it may to those of the lower group, while at the same time protecting the racial stock—here is a task that requires all that we can bring to it of specialized skill and coördinated endeavor.

"The common problem, yours, mine, everyone's, is not to fancy what were fair in life provided it could be—but, finding first what may be, then find how to make it fair up to our means";

*In this common problem of health education, how may the nurse function?*

Modern nursing has grown up in hospitals, and nursing to many minds calls up a picture of sickness and distress. We popularly associate the nurse with the care of the sick, rather than with education for health. But the nurse has also grown up with the health movement. She has lived through the great periods of discovery and invention that have given us our present day enthusiasm for health. She has seen asepsis transform the hospitals. She has seen the decline of typhoid fever, diphtheria, and kindred diseases. She is in close touch with the laboratories and their constant search for specific remedies against disease. She has seen the part that scientific diet plays in the treatment of diseases of metabolism. She is accustomed to working with people as individuals, in unique situations, with special problems that call for united action.

The nurse—all nurses—have become oriented in the field of disease prevention which is one of the first steps toward building positive health. While all nurses have participated in the movement for disease prevention, it is to the public health nursing group that we must turn for concrete evidence of active interest in health education.

Although the educational program of public health nursing has been closely correlated with advances in medical science, the teaching



function of the nurse was recognized by the founders of modern nursing, and the same humanitarian movement that led to the establishment of nursing schools in hospitals, led also to the organization of visiting nurse societies for the care and instruction of the sick poor in their homes.

When medical science learned that the control and prevention of disease necessitated a campaign directed toward the education of the individual, and that this education meant much more than the simple giving of information, the district nurse was recognized as an agent who could help to bridge the gap between science and ignorance, since she had gained the confidence of the people and was intimately acquainted with the conditions that existed in the homes of the poor.

District nursing was thus given a deeper and richer educational content and with the development of the many separate campaigns for the reduction of health hazards, separate groups of nurses were organized to serve the various medical specialties. Instead of the one district nurse who visited all homes for the single purpose of sickness care, the infant nurse, the tuberculosis nurse, the school nurse, the maternity nurse, et cetera, et cetera, were differentiated and set apart for special service in the homes and in the clinics that grew up with the new knowledge.

Public health nursing—thus evolved from district nursing—has attracted, in increasingly larger numbers, women of intellectual curiosity and scientific interest who have sought, not so much to perpetuate a traditional skill, as to use that skill for an entering wedge to open up opportunities for constructive health teaching.

In all forms of public health nursing however, it has been impossible to focus interest and effort upon a particular disease condition, or age-group exclusively.

The study of the maladjusted eventually leads us back to the earliest period of development. The significance of childhood, as the starting point of our efforts becomes apparent. To create an environment that shall be safe for the child—one in which he may develop to the maximum of his hereditary potentialities—requires the collaboration of all specialists who wish to participate in health education.

The public health nurse—new style—is learning to look at each family with which she comes in contact as an educational unit. She

is interested in all phases of health work for individuals but considers the individual in his proper relation to the family group. She would gather up the subdivided knowledge of the nurse specialists and weave this into a comprehensive nursing program for the family.

She would center her attention upon the *situation* that presents itself in the family rather than upon any particular body of subject matter that she wishes to teach, although she will draw upon that subject matter to meet the needs of the developing situation.

She sees the educational progress as one of experience and activity. She asks herself when she looks at the family:

1. What situation have we here?
2. What sort of problem does it show?
3. What new information does it involve? For the family? For myself?
4. Where shall I go for that information?
5. What action will lead toward a solution of the problems that this situation presents?

The public health nurse looks at the movement for health education and believes that her established position in the home gives her a special place in the campaign. Her work for the on-coming generation begins in the prenatal period, is extended through the period of infancy, and the preschool years.

She knows the home in times of good fortune and again when disaster overtakes it.

But the nurse's teaching program is complementary to all other health services for the family.

The best nursing service would fail if it were not correlated with an adequate medical service, and the educational clinic with auxiliary services, becomes a necessity for the members of the lower physical-social group.

As an outgrowth of home visiting and clinic contacts the nurse organizes her special classes for bringing the mothers together for joint discussion of their common problems.

Later on, the mothers themselves may be influential in getting the fathers together for a better understanding of their responsibility to family and community.

Having its origin in a humanitarian movement in behalf of the

poor and oppressed, public health nursing has become a significant factor in the campaign for the reduction of disease and the prolongation of the life span.

With the newer knowledge that the biological sciences have given us has come a new impetus in education and a new method. Adult education—especially in the science of child care—is the concern of many agencies,—the press, the church, the theater; the extension departments of universities; community forums; trade unions; parent-teacher associations; national groups like the American Child Health Association; the nursery school movement; health centers, et cetera, are all concerned with the dissemination of new knowledge, and reach large numbers in the Great Society, but in every community there remain still larger groups who are not influenced through any of the many movements for the popularization of scientific truths.

There remains the need for individualized, intimate, and prolonged instruction in the simple, fundamental rules of healthful living.

It is in this phase of health education that the nurse sees and seizes her opportunity to serve.

*Miss Abbott:* Nothing has interested those of us who are concerned with the preschool children more than the work that has been done for them in the Merrill-Palmer School, and now we shall have the pleasure of hearing Miss White speak on Health Education and the Preschool Child.

## HEALTH EDUCATION FOR THE PRE-SCHOOL CHILD

EDNA N. WHITE,  
*Director, Merrill-Palmer School*

THE children of the Merrill-Palmer nursery school represent a different group than has been discussed here this afternoon. They come for the most part from the middle-class families and are not of the type who have suffered from poverty and its handicaps. They do, however, present health problems that are of interest to parents and health workers and the solution of their problems may be of assistance to other groups.

Our problem is a double one, involving both the child and the parent, since the problem of the infant and preschool child cannot be solved without the coöperation and understanding of the parent. It must always be remembered that education of the parent involves not only giving him information, but also giving it in such a way that it changes his attitudes and practices, a very much more difficult task. In the case of the child, one must arouse his interest, giving him at the same time a few simple facts within his comprehension and seeing also that proper health habits are formed.

We recognize, of course, that health education of the preschool child is only one aspect of the whole problem, but since both the child and the parent are younger, health education at this time offers greater promise than at a later time. The program with older children is likely to be remedial rather than preventive. A program with infants and mothers has, of course, the same advantage.

With the parent, the first problem is to help him to understand the child and its problems. The child must be recognized as a unified organism with all phases of its health—mental, physical, educational, and social—interrelated; in other words, it is necessary to think in terms of an all-around program. In order to secure such information regarding individual children the services of specialists of various types are necessary. And in order that the findings of these various specialists shall present an all-around picture of the child, they must be integrated. Since such service is expensive, it is desirable that group service be developed and expense reduced by "pooling," so that parents for whom the expense would otherwise be prohibitive can make use of it. The nursery school is one type of agency offering this service to parents, though it is not the only one. It represents a rather recent development and since the program depends on the information secured and integrated by specialists it is one of the most efficient.

In the nursery school, we attempt to express the findings of the specialists in terms of growth and development, that is, in terms of positive health teaching.

From the physical viewpoint, the specialists include the physician, the nutritionist, the physiotherapist, and the dentist. It is not easy to secure these specialists with the right viewpoint. The physician usually thinks in terms of sick children, and the training of the other specialists

is usually in the direction of remedial rather than preventive programs. Very often, then, it is necessary to give these specialists a period of training with normal children. These specialists secure their findings from physical examinations of the child, routine laboratory tests, records kept at the school, and records kept by the parents. It is very desirable to have the coöperation of the parents in record keeping, since it emphasizes in their minds important points and procedures and makes them more objective in their observations of the children.

The study of the child's mental growth and development includes his mental level, character traits, and habit formation. The specialists in this field also have been trained to observe the supernormal and subnormal rather than the normal and must often change their point of view.

The problem of determining the mental level of preschool children is difficult and requires special training. Our methods at present are crude and need much development. Determination of the mental level has been an increasingly important problem in cases of adoption. The methods of determining physical status are far better developed than those for determining mental levels. Methods for determining character traits are also greatly in need of better development. Since this mental health phase is much less well understood than the physical, I asked one of our staff members to suggest a number of questions which parents should be able to answer regarding their children. I will read a few of these, which you will understand do not attempt to cover the field, but merely suggest trends: What aspects of the child's environment affect his rate of mental growth? What changes in environment might produce a more favorable growth? What types of educational equipment that will help secure a well-balanced mental development can the average home provide?

You will realize that if parents had such information regarding their children they could work much more intelligently in developing attitudes and character.

From the standpoint of the social aspects, such problems as the inculcation of right attitudes toward authority, affection, reality, sportsmanship, and many others need development. Much can be done in this field with preschool children, and these early attitudes carry through life.

In the educational field a great variety of problems arise, needing the services of skilled teachers as much as do those of children of school age. It is necessary to provide first as rich an environment as possible, so that the child may select from it the activities that will best develop him. During the preschool age the child develops motor controls, vocabulary, and appreciation of color, form and music. A trained teacher, observing the child, may give him enough guidance to develop best his individual powers, without imposing upon him the adult point of view. Specialists and teachers who are accustomed to dealing with preschool children are able to secure a response and attitude on the part of the child that persists and becomes habitual. It is not a simple problem to secure the best methods and equipment for such an environment, and it may easily become a community problem.

Institutions such as ours, interested in the best possible development of individual children, soon find themselves limited by the small amount of reliable information available. They therefore find it necessary to set up programs of research. At present, a considerable number of such programs are being developed in various parts of the country. Of the institutions carrying on such programs, the Merrill-Palmer School is one. In general, as pointed out by Doctor Anderson of the University of Minnesota, the plan of these child welfare research institutes follows the principle developed by the government in agriculture—an experimental project combined with an extension plan of education. The educational program is intended for parents especially, but includes also nurses, teachers, social workers, and others who come in contact with children and need to understand the problems of parents.

The research program varies for each institution. As an illustration, I should like to suggest the type of studies we are making. When you see how many problems there are and how comparatively little has been done you will realize the need for research in this field.

In our nutritional research laboratory, we have been working on the problem of human milk in relation to child health. Four articles on this project appear in the May, 1927, issue of the *Journal of Biological Chemistry*.

On the physical growth side, we have been compiling height and weight tables from our own children. In the last five years we have

set up our own norms for comparison and we have also a considerable qualitative list of accompanying physical conditions.

Food problems are very important in the preschool years. We have been interested in methods of securing the coöperation of the children and have had considerable success with increasing food consumption, even with the "non-appetite" children, of which there are a considerable number. The problem of increasing the amount of food consumed at school is simple as compared with that of increasing the amount eaten at home. So the child must be given an idea that carries over to the home. The parents report that we have been quite successful in educating the child and changing his attitude in these matters.

We have studied also the problems of normal sleep. In this study the parents have made a very definite contribution. Assistance with a problem of this type helps to educate the parent as well as to solve the problem.

Studies are being made also of the quantity, weight, and type of clothing worn by our children, and types of clothing simple enough to enable young children to be independent in caring for themselves are being developed.

The measurement of posture is one of the most difficult problems to be solved. We have been working on it for some time and Doctor Scammon of the University of Minnesota is making a contribution in this field.

From the viewpoint of dental development, outstanding problems are those of arch development, tooth eruption, and malformations. Corrective work in dentistry is widely regarded as necessary. But at the preschool age there are questions of the kind of corrections to be made and how far they are necessary, since some malformations correct themselves.

We have made studies also of the vocabulary of children, of their motor coördination, and of their laughter, play, and fatigue. All of this will indicate the wide range of inquiry necessary and the very small amount of real information we have. We are making a community study of the school children on Grosse Ile, an island near Detroit, where sanitary and economic conditions are unusually favorable. Here the number of children is limited, so we have been able to make an intensive study. Over a three-year period the total regime

for each of these children has been studied, in order to determine as far as possible the kind of child produced by such a regime, so we probably have as complete a study of this kind as has been made. Incidentally, we found the greatest variant to be food. The American Child Health Association is, of course, especially interested in studies of this type.

On the psychological side, we are studying methods of testing the mental levels of preschool children, and within the year we shall have a bulletin on this problem.

We are also trying to follow our children after they leave us to see how they develop. Whether children who have had the type of training offered in such a school as ours really do develop more satisfactorily is, of course, a question that cannot be answered for many years. To answer this question we must follow the development of a sufficient number of these children and compare them with others from similar families and conditions. This we hope to do.

On the educational side, studies of vocabularies, motions and activities, play, stories, and so on, are in progress. Until we have more accurate information about these activities we cannot set up really scientific, educational programs for preschool children. We have had a very interesting study of the beginnings of the child's art expression. Last year an exhibit was arranged of the paintings made by the children with no direction, and at such times as they wished to make them upon the paper and with the colors left about for their use.

In parental education, we hope to work out for the parents better technics for developing in the child such activities as are suited to his age. Doctor Blatz of Toronto, in a report given at a recent meeting, showed the contributions parents have to make to this whole program under the guidance of specialists.

Doctor Marston, Secretary of the Child Development Committee of the National Research Council, compiled and published in March of this year a bibliography of research in child development. This bibliography includes contributions from the fields of anthropology, anatomy, pathology, bacteriology, genetics, nutrition, orthopedics, pediatrics, physiology, psychology, psycho-pathology, biochemistry, and zoölogy. This is not a complete list, yet there was pertinent material



suggested from each of these fields, which indicates the possibilities and the breadth of interest.

The wide range of inquiry and the increasing development of centers of research lead us to hope that we may be able later to set up much more definitely the health needs and problems of preschool children. The extension activities of the groups connected with research centers, together with the work of such groups as this, will make it possible to carry our knowledge to the parents of preschool children, and so, by the application of our knowledge, to produce better children. It means coöperative and coördinated effort, and I hope this group of specialists will make this effort and formulate, from the knowledge we already possess, the beginning of an answer to the question Mr. Hoover asked this group last year—What constitutes the normal in children?

In answer to a question, Miss White said that there were at present five child welfare research agencies of the kind here described—those in Columbia University, Cornell University, University of Minnesota, University of Iowa, and the Merrill-Palmer School. There is also work going on at Johns Hopkins University, the University of Cincinnati, and in Harvard. All of these carry on research in child welfare, and nearly all have nursery schools as laboratories for their work and carry on programs in parental education.

Between fifteen and twenty nursery schools have been or are being established in the colleges and universities. Here the emphasis is upon preparental training.

There are also a number of nursery schools set up by individuals, but those in connection with the colleges and universities are more likely to include specialists and to set standards.

There is a movement in one or two places toward setting up such research agencies in connection with State Departments of Health.

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MONDAY

*Evening Session*

*Presiding:* DOCTOR WOOD

The Community and the Child

JOHN ANDERSON, Director of the Institute of Child Welfare, University of Minnesota

Determining the Normal

VERNON KELLOGG, Secretary, National Research Council

Education in Health

W. W. PETER, M.D.



## MONDAY EVENING SESSION

*Doctor Wood:* The first address on our program to-night will be presented to us by Doctor Anderson.

## THE COMMUNITY AND THE CHILD

JOHN E. ANDERSON, PH.D.

*Professor and Director of The Institute of Child Welfare,  
University of Minnesota*

A STORY was recently told of a number of men of different nationalities who set out to write a book about the elephant. An Englishman traveled off to India, and in the course of time there came out a book entitled "The Elephant and Big Game Hunting." The Frenchman, it is related, sought his chamber, and soon published a book called "The Loves of the Elephant." The German retired to his study and in time appeared with a four volume treatise called "An Introduction to the Study of the Elephant." The American's book was the last to appear. It was entitled "Bigger and Better Elephants."

Although this story hits strongly against a prevailing American tendency, it is, nevertheless, a great compliment to the American. If elephants were indigenous to the United States, I am sure we would produce bigger and better elephants.

There is no need of recounting before a group such as this that has devoted its best energies for years to the better care of the child, the glorious history of the advances made by the community in its relation to the child—for that history is part and parcel of you—you have as individuals and as an organization played heroic rôles. But it is worth our while to stop occasionally and take stock and discuss the directions in which we are going. I take it that was the purpose of your committee in inviting me to speak, for they asked me to discuss certain problems that may arise in the future in connection with our health program.

For a moment, let us consider the past and, to be more concrete, the past century. What has been done by our society for the child in

the last one hundred years, and through the child, for the adult? You are familiar with the charts and figures that show the changes in infant mortality, the lengthened span of life, the conquest of epidemic diseases. Truly we have raised the level of physical care beyond fondest expectancy. You are familiar with the advances in education, the fact that thousands of children are found in our schools where hundreds were found before. Universal education, once a fantasy, has become in our country a reality. You are familiar with the advances in our handling of the child on the economic and social side—where many children and young children at that, were found working long hours in factory and shop; relatively few young children are so found now. You are familiar with our better living conditions, our better clothing, our better nutrition. Wherever you turn, to whatever aspect of the child's life you wish, you find a higher level of care during the growing period.

Sometimes you find people who doubt this, who talk of the good old days, who are critical and scornful of our modern life. These individuals are always able to select striking individual instances, and point to the exceptional child of the earlier period as a case in point. It is true that in 1827 some children were healthier, some children were better educated, some children were happier, and some children were brought up under better conditions than are many children now. But it is also true, and this is the all important point, that the great majority of children are healthier, happier, better educated, and brought up under better conditions now than were the great majority of children then. Our 1927 conditions are not perfect; there are many serious evils attending our modern life; there are many problems yet to be solved. But let the discouraged worker who sometimes feels all efforts futile read the pages of history. Discouragement will disappear and the feeling of playing a part in a glorious advance in the battle against ignorance, disease, superstition, and evil take its place.

Modern man has problems and difficulties, but he has also forged in science a great tool with which to attack them. Never before has man so capitalized his curiosity and his exploratory tendencies, never before has he developed that honest, impartial, careful examination of the world and himself, that we know as science. Because of the insight which science gives, he sees ever more and newer problems, and often grows despondent at the vistas opened up. But the very tool which has

opened up the vistas has brought him to the point where he can see the problems. And in bringing him to that point the world has been changed. Truly as never before in the history of man, the dreams of one generation are becoming the realities of the next. We make mistakes, but we are as never before aware of our mistakes and seeking the methods to eliminate them; there are wide areas and many places which lag behind, but our methods of permeating those areas and places have grown apace—that which has brought our attention to our deficiencies also brings to us the method of meeting those deficiencies. Our community is no longer a pocket but world wide, new problems arise because of the extent of our cognizance, but the tools are in the forges of our workshops and laboratories for meeting those problems. Let not the doubts of narrow vision assail us—when on every side doubts are vanishing and problems are on the road to solution.

Our health program in the past has concerned itself very largely with the meeting of deficiencies. We have been, and are now, attempting to bring individual children and individual adults up to a higher level of functioning by virtue of meeting specific physical, nutritional, and mental handicaps. Our first and obvious task as a community has been the curing of the sick, the improvement of the handicapped, and the meeting of the difficulties imposed by unfortunate social, educational, and economic conditions. It is obvious, if one considered any continued program of meeting particular deficiencies, that ultimately there will come a time when the effects will not increase in proportion to the amount of effort expended. You can decrease the infant mortality rate by a decided amount in the early years in which you start to attack that problem. As years go by, the decreases will become progressively less and less until, ultimately, you will reach the point where the relationship between success in meeting the deficiency situation and the amount of energy put in will about equalize one another. In other words, you are dealing with a situation involving the law of diminishing returns.

As the community meets deficiencies and brings the individual nearer and nearer an optimal state of health, new problems begin to appear. This has been brought out in interesting fashion by Miss Roberts of the University of Chicago, who made a study of the nutrition of young children, and found that while the nutritional level of

children had been greatly increased by the community's stress upon proper diet, at the same time there were apparent many more behavior problems centering about the problem of eating. The improvement in nutritional status carried in its train, partly I suppose because of incomplete instruction, a number of adjustment problems which had not existed prior to the solution of the particular nutritional problems.

Here then has emerged a new problem, one that concerns itself with what we may call the whole child. It is not enough to prescribe what the child shall eat—he must eat it; if he is made to eat it in a certain way the effect upon his ultimate development may be worse than if he had not eaten the prescribed food at all. Obviously, we move toward a conflict between two aspects of the life of the child—one nutritional, one behavior—someone has to balance the two. That is, in brief, the problem the community faces—as soon as it meets successfully the serious deficiencies—the task of weighing and balancing the various factors which go into the total child comes to the fore. If the child is seriously ill—there is no problem of balance—the child must be made well; if two relatively milder conditions arise in the life of the child, both must be handled in the light of the child's total development.

One can, of course, give instance after instance of the necessity of weighing the various factors which go into the life of the child. Only recently I visited a nursery school in one of our large cities in which there were a group of twelve children all of whom had come from very wealthy homes, and who were apparently in excellent physical condition, to ordinary inspection at least. But they presented a whole series of interesting problems. In general motor coördination, they were much behind the children who come from more ordinary homes into the nursery school. Likewise in speech development they seemed to be definitely retarded.

The reasons for these deficiencies became clear on conversing with the teacher. She pointed to one five years of age who had never washed himself prior to the time of coming to this school. Here was another who had never taken care of himself in any way. Another had never buttoned a button on his clothes, and another had been kept in a baby buggy until he was three years of age. Although the parents of these children undoubtedly felt that they had done everything for them, compared with typical children given plenty of opportunity for activity

and all round development, they are at a decided disadvantage. With respect to the motor and speech responses, they were in much the same position as a farmer boy picking up a tennis racket for the first time. Here is a degree of health that falls short of the optimum. While it is true we are here dealing with a deficiency, just as much as in the case of malnutrition, it is also true that we are moving over into a field in which many factors must be taken into account in laying out a health program. The young child is, as one writer put it, "multipotential," that is, can develop in many directions. A corollary of multipotentiality is the necessity of selection. It may be possible for us to raise a particular child to a perfect nutritional status, but it may be necessary, in order to do this, to cut off other and almost equally desirable trends.

What have been the effects in community organization of our necessary preoccupation with deficiencies?

In the first place, many agencies have been developed in the community for meeting particular deficiencies—hospitals for the sick, institutions for the defective, welfare organizations for social and economic problems, special schools, and so on. A whole host of particularized agencies have arisen to meet particular problems. As these organizations work with increasing effectiveness, and as science develops the devices by means of which deficiencies can be met, these being special organizations, fail in part to meet the problem of the whole child, and there arise problems of coördination and coöperation among various organizations and various individuals. One is amazed at the number of organizations in every community whose program in some way or other touches upon health problems. But there are many individuals who fall between our excellent agencies, and there are many agencies which duplicate one another's work in the individual case. We are overorganized in one sense, underorganized in another.

We are all groping in our modern community towards the type of coöperative and coördinative effort which will most effectively tie-in various agencies so that the problems of the whole child and of the normal child can be met. It is here, I think, that the advances of the future must come.

The second effect of our deficiency program is seen in science itself, which likewise has developed by differentiation into more and more specialized fields. We see this in the development of our experts, in



the development of our universities, which are splitting various disciplines into more and more minute parts. We see it in every aspect of our modes of studying and of treating the individual.

Our procedure in science has been, and is, largely analytic and concerns itself with the relationship of one factor to another. As the scientific problems centering about the deficiencies which appear in the developing child are met, increasingly there will arise the need for what we might call a synthetic attack. Our advances in the next ten or twenty or fifty years will come largely in the way of coördinating the material developed by two or more separate sciences, first so as to meet the problems which fall between those sciences, and later to give us a view of the whole individual.

As soon as we begin to coördinate and integrate scientific results about the problem of the whole child, some of our now highly regarded analytic results will not seem so important as they appear at the present time. In other words, probably the best method of checking our growing tendency to faddism, the emphasis of specific and particular devices as panaceas for all the needs of the child, will come through tying-in together the different scientific approaches, and getting a view of the relation of each to the whole life process of the individual. This is not a criticism of the analytic approach nor of the study of two variable relations—more and better work must be done along that line as well.

A third effect of our deficiency program lies in our educational approach to the child. In education, as in other fields, deficiency experts have developed, each seeing the field from his own point of view, each riding his own particular hobby.

Originally in education there was little endeavor to meet the deficiencies of the individual—education was a sort of sink or swim process. With the increasing emphasis upon individual differences, the deficiency program was developed, with all kinds of special schools for retarded and defective children. In recent years, emphasis has gone in another direction—toward the exceptional child. In addition, there have always been in education the proponents of specific discipline—each trying to get his or her subject in an important place in the curriculum—each regarding his own field as absolutely essential for education. Further, there has been a tendency to look upon education as a somewhat formal process set apart from life.

But education is, in a real sense, living. Increasingly we are attempting to bring education and living together. For instance, the community is endeavoring to develop devices by means of which the educational system becomes the center of the community. On the one hand, there is a growing tendency to bring the school in contact with the home by the organization of parent-teacher associations and the development of community centers with the school, and on the other hand, by the development of adult education programs which carry the school on into mature life. Through these movements the community should in part correct the tendency to a deficiency type of program.

Further, education is not without its effect on the home. Many of us realize that one of the greatest results achieved by our health education program in the schools is obtained not on the children in the school, but in the home, by means of the information which the child carries back and which gradually, over a period of years, modifies the home procedure with reference to health matters.

Education is, above all, preparation for living—if correctly conceived, it should look toward the adjustment the individual is required to make as an adult—and should be more than any other field that in which all the particular specialties and the deficiency measures fall into their proper relation to the whole.

We may turn, now, from a consideration of the effects of the deficiency program in hygiene, science and education to consider the individuals through whom the community must make its approach to the child. There are two types of individuals who come into long and intimate contact with the child and who wield a tremendous influence in transmitting to the child the accumulated experience of the race and the development of its attitudes toward living. The first of these is the parent. Increasingly, it is becoming clear that it is the parents who assume a large place in the life regime of the child and hence should be the locus of our efforts to improve the lot of the child. Parental education is the term applied to a new movement in the field of adult education which seeks to make the approach directly to the parent. Why is the parent so important a part of the program? An illustration can suffice.

A child is not an individual separated and set off from his parents or the home situation, but is an individual very much a part and parcel

of the home situation. Suppose we have a child who is afraid of lightning; that is to say, who has built up a serious fear of lightning. We might say that we can eliminate the child's fear of lightning by treating the child in a clinic, by taking him somewhere where he gets advice, by making beneficent gestures toward the child, by spanking him, by punishing him. But, nevertheless, no device is going to work if, at the same time, the mother during the fifteen or twenty storms which occur during the summer pulls down the curtains and lies down on the bed and says, over and over again, any number of times, in the presence of the child, "Oh, I am so afraid of the lightning!" No matter what you do to that particular child, you cannot meet that particular situation without getting at the parent in some way. The emphasis upon parental education is a logical development as we pass from the period of meeting deficiencies by specific procedures to the problem of the whole child.

The second person who comes in contact with the child over long periods is the teacher. Although the individual teachers change, nevertheless, the school is the agency of primary importance developed by the community for the preparation of the child for future adjustment. Further, despite a tendency to bring in special teachers for particular fields and subjects, a tendency which is extending downward in the school system, nevertheless, the classroom teacher rather than the specialist is the individual who must, through her day to day contact with the child, make the program effective.

The actual center, then, of much of our program directed toward the health of the child, after serious deficiencies have been met, must be the parent and the teacher, because every other individual who comes into the child's life comes in only incidentally, and for only a relatively small part of the time. To make the program effective for the child as a whole, we must somehow reach the teacher and the parent. Future developments in our community approach to the child are more than ever before going to be centered about the teacher and the parent.

It seems to me that one very effective mode of meeting the problems of the child as a unit rather than as a part or an organ will arise through setting up in various communities, perhaps with the state as a unit, organizations which have as their task the study of the whole child in relation to his home situation, in relation to his general mode of devel-

opment and in relation to the everyday type of problem that the parent and teacher meet, and to connect with this organization an extension or dissemination service which will seek to bring the information so obtained to the parent and the teacher. Such organizations would not have as their purpose the study of the sick child, the distinctly abnormal or defective child, or the socially and economically handicapped child, but have as their primary purpose the study of the typical or usual child. Incidentally, of course, valuable information will be obtained with reference to the problems of deficiencies. This is the type of organization which has been found effective in dealing with problems in another field, that of agriculture.

When the United States undertook the study of agricultural problems, it set up in each state of the Union through federal aid an agricultural experiment station, for fundamental and practical research, and coupled with this an extension service to carry to the farmers of the state through bulletins, institutes, demonstrations, and local agents, the information obtained in the central station. We are all familiar with the success of this plan in improving agricultural practice, developing scientific farming, and in solving scientific problems. Two agencies here exist, side by side, one for research, the other for dissemination.

What is the value of these agencies to one another? The extension service through its close contact with the practical situation sets problems for the research workers, and keeps them from wandering too far afield. The experiment station keeps the extension worker supplied with sound information and maintains through the extension service a scientific approach. Without the extension service, the research organization would become sterile and out of touch with the problems of everyday life; without the research station, the extension worker would become narrow, opinionated, dogmatic.

Such an organization emphasizing research on the one hand, dissemination on the other, moves steadily forward into the problems, the solution of which is so necessary and important. Similar organizations should be set up for the study of the development of the child—certainly the child, as well as cattle, corn, and hogs, offers possibilities.

I would like to emphasize particularly the importance of the research program in such an organization. If we are to utilize effectively the

educational opportunity provided in the community by parents, teachers and children, we must be able to give, not superstitions, not prejudices, but facts and a sound, wholesome attitude, founded upon the basis of impartial, careful, and honest scientific work.

In conclusion, may I say that there are two dangers in the field of health education which must be avoided. Both can be corrected only by keeping closely in mind the relation of the part to the whole. The first of these is the faddist danger, arising from our tendency to look for panaceas, and the tendency of one group and then another group in its enthusiasm over a discovery to attempt to give universal applicability to principles which are limited in their nature and scope. Too often the public approaches the expert with a demand for a sort of physical, mental, and moral delousing station. The remedy for this tendency is to be found first of all in adequately conceived and controlled research, which determines the limitations of a program as well as its advantages, and in the dissemination through the whole community of sound information and attitudes.

The second danger which the community faces is a danger which may arise out of evaluating health out of proportion to all other aspects of living. Physical health, while in a sense an end, is also a means to an end. In raising human beings, we are not raising vegetables. We have all known individuals in a high state of physical perfection who somehow or other failed to use that perfection which had been developed. There are some healthy gunmen. And we all know individuals who are so concerned about their health that they get relatively little done. The community in undertaking a general health program, no matter what its form, undertakes also an obligation to determine the direction and the method by which that health shall be used. As individuals we spend part of life in conserving health, part of our life in expending it. Inextricably bound up with the problem of conservation is the problem of use.

You recall Theodore Roosevelt's statement that it is better to wear out than to rust out. The community must not bring health to the individual in order that he may rust out, but must bring health to the individual in order that he may live well.

*Doctor Wood:* Doctor Anderson's closing remarks suggest to us

the problems of determining whether we are to consider health as a conditioning end, or an unending condition. I suppose we shall find the answer by research and experience.

In the greatly regretted absence at this meeting of our president, Mr. Hoover, we are particularly fortunate in having Professor Kellogg here, who was one of Mr. Hoover's most trusted associates in the great relief program of the world war, and who is also closely associated in Washington with Mr. Hoover's promotion of science and scientific research.

I have, then, special pleasure at this time in announcing as the speaker Professor Kellogg on the subject "Determining the Normal."

## DETERMINING THE NORMAL

VERNON KELLOGG,  
*Secretary, National Research Council*

I AM here this evening primarily as interested listener and learner rather than speaker and adviser. But as I am to exercise the privilege of talking to you for a few minutes, I want to explain to you my special presence as representative of an organization, the National Research Council, whose particular interests are concerned with the promotion of research in fundamental and applied science for the benefit of the national strength and welfare. Accordingly, what I have to say to you is determined largely by these interests.

In attempting to discuss the subject assigned to me, namely, "Determining the Normal in Living Things" with particular thought of the "Normal Child," I find at once two uses, or definitions, of the word "normal." I shall wish to refer to both of them.

The first is that indicating the biologists' familiar understanding of the normal as the mean, or, rather, the mode, in any given group of individuals. As a familiar example may be taken the biologist's conception of a plant or animal species. There is a close similarity—almost an identity—in the biologist's attempt to define a species and his attempt to define the normal in any group of living things. And although we are more interested in a normal as regards the human child differently conceived, one that we may call the child student's

conception of the normal, there is a significance in the biologist's normal that we may well try to understand.

A species is a group of individuals showing many similarities in many characters. But there is never identity among these individuals. Recall the biological axiom: No two plant or animal or human individuals are ever exactly alike; no two ever have been or ever will be.

Variation always exists. Variation is the basis of evolution. Variations are the building stones in Darwin's edifice of evolution explanation. Variations are caused by inevitable differences in those two fundamental factors, heredity and environment, which determine the structural physiological and psychological character of every individual, which determine in a word all human fate.

The biologist, in his attempt to recognize Species and Normals, enters upon an undertaking which requires most careful and scientifically conducted study and research, but it requires nothing impossible. Scientific research is not wizardry; nor is the research scientist a wizard; he is just a man who observes more carefully and studies more intensively than other men the phenomena and the order of Nature. It is this careful scientific research that must be brought to bear on the important problem of the determination of the Normal in Living Things, and specifically of the Normal Child. How does one begin such a research?

The Normal—still keeping for the moment to the biologist's general acceptance of its meaning—is more abundant than the Abnormal, certainly more abundant than the largely abnormal. Hence a determination of the most abundantly represented type among the various types represented in a group of individuals may be presumed to be the normal type. This assumption may at least be advisedly used as a working basis for careful study of the variations existing in the group.

The biologist defines his species on the basis of this most usual type. He calls it the mode, or the modal type, and he picks out an actual individual example of it and calls this individual the type-specimen. Then after the careful examination and comparison of this type-specimen with many similar—but, remember, always slightly to more largely varying—individuals, he determines a permissible range of variation which may be accepted as not carrying individuals beyond the species range. One may think of the type-specimen as lying at the

center of a circle of not too large diameter, while lying along the many radii of this circle are many individuals nearly like the central type-specimen, but differing slightly, both qualitatively and quantitatively, from it. The qualitative differences will be indicated by the distances apart of the various radii; the quantitative differences by the distances outward along these radii from the center. Of course, the circumference and the total area of the circle have to be more or less arbitrarily determined. Theoretically this determination seems difficult to make; in actual practice, it is not so difficult. That is, for all practical purposes it is not at all impossible to classify individuals into various species or other various definite groups. By this method may be made also the determination of the biologist's Normal Child.

But we have another normal child in mind. It may be called the ideal Normal; the Normal, sound in body and mind and ushered into the world under the most favoring circumstances, which we should like to see realized as the biological or statistical Normal, and which it is our passionate interest and steady effort to try to have so realized. That is the Normal and that is the goal which your president, Mr. Hoover, described to you in his address last May, and which he has ever in mind. The possibility of making this ideal Normal the actual statistical and biological normal is the spur which urges this Association on toward its golden goal. But no more than the biologist's normal child can the philanthropist's ideal normal child be determined—that is, defined—carelessly. These determinations cannot be made by loose general observation. They cannot be made on a basis of the most benevolent of emotions. They cannot be made by untrained workers. But they can be made by careful students using approved scientific methods of work. In such a way only can we arrive at a specific understanding of our aim and the goal to be achieved.

So much, then, as regards finding and defining the Normal Child. But the Normal Child, when thus found and defined, introduces another problem to which the American Child Health Association may well be expected, and should itself expect, to try to contribute, in some degree, a solution. This is: What is it that makes a child normal and what is it that makes a child abnormal? The global answer is easy: It is the combined influence of the two fundamental formative factors,



heredity and environment, that makes any child what it is, normal or abnormal.

But this answer to our greatest and most insistent question about the child must be more detailed if it is to be of practical use to us. We need to know how to distinguish inherited characteristics and capacities from environmentally created ones. For in any attempt at ameliorative treatment of the child these two sets of characteristics must be clearly distinguished and differently treated. One set lends itself much more readily than the other to rapid amelioration. We need to know something of the respective rôles and degrees of influence of these two all-determining factors in the development of the child. We need to know how far good environment may compensate for bad heredity, and good heredity for bad environment. We need to know how we can control, and to what extent we can control, both the heredity and the environment of the child.

We must protect ourselves, in trying to find out these things, from being carried off our feet by the extreme claims of the convinced hereditists, on the one hand, and the extreme claims of the convinced environmentalists and educationists, on the other. With only heredity or only environment no child would ever come to anything. Both heredity and environment are absolutely essential to the development of any child, of any living creature. Heredity and environment should not be looked on as antipathetic, but as complementary. Innate capacity is primarily determined by heredity; the degree to which this capacity may be used is largely determined by environment. Whether inherited capacity is small or large, proper environment and opportunity are necessary for its best use.

This proper environment should be given the child from the very beginning of its existence. In fact, that it may have this proper environment from the beginning, which is, of course, in the mother's body, this mother should be in right condition to provide her infant with a proper environment through all the period of gestation. The best care of the child demands good care of the mother. The child should be protected from congenital misfortune. Many confuse congenital conditions with inherited conditions, but these are not identical.

The heredity of the child is determined by the character of the parental germ plasms; but its actual physical and mental condition at

birth is due partly to maternal environment. At birth a child is nine months old, and has been exposed during that full period to an influencing environment, as well as having been influenced by a fixed biological inheritance. This is too often forgotten.

Now, to be able to assimilate understandingly present knowledge concerning all these important things, and especially to be able to contribute new knowledge concerning them—for the American Child Health Association should include in its aspirations and plans no less a thing than extending the range of scientific knowledge of child biology—our workers, whether in laboratory, clinic or field, should have a basis of scientific training. Let our emotions and philanthropic sentiment be our stimulus to interest and action, but let a scientific attitude and scientific study be our controls. Let us do our work scientifically. To do it scientifically requires scientific training. Some of this training should be in the natural sciences, some in the social sciences.

This training should include a working understanding of physical measurements (anthropometry) and a working understanding of mental, sensory, and temperamental or emotional tests. As Davenport has recently declared, the most important future applications of bodily measurement are probably to be made in the study of the development of children in relation to the causes which affect that development. He has in mind, I presume, nutritional causes, nervous causes, endocrine causes, genetical causes, and causes which lie in the field of the general relation to disease of individual or group constitution. The measurements themselves are being constantly refined by the physical anthropologists, and their significance is being always more and more revealed. The causes of the course of development, which are many and inter-acting, need careful study. New things about them are being discovered. More new things are yet to be discovered. Take, for instance, a single example in the field of nutritional causes—that of the diet. Only a few years ago we learned to our interest and profit, from scientific study, that the daily diet must include a sufficient variety of food to insure a needed balancing among protein, carbohydrate, mineral salt and other food elements; and that the total of the balanced ration must provide a certain needed minimum of calories. The slogan was "Watch the Calories!" Now we know that even with sufficient

calories and with a proper relative make-up of the proteins, carbohydrates, and the rest, the diet may be fatally insufficient to produce proper development if it lacks the presence, in minute quantities, of those still rather mysterious but all-important elements called vitamins. There are at least three, perhaps more, different vitamins necessary to the diet of the growing child. This new thing we know to-day; what shall we know to-morrow?

Our workers must be scientists; they must be eager students of human, and, especially, of child biology. Much has been accomplished in this field in which we are so interested. But very much remains to be accomplished, and I hope and believe that some of this that is yet to be done is going to be done by this organization.

In the division of anthropology and psychology of the National Research Council we have a special committee on child development. This committee, among its various activities, appoints about 50 research fellows annually who are mostly chosen from among women university graduates who have had training in sciences basic to the study of child development. I think you may find it to your advantage, in your search for trained workers for your staff, to keep an eye on these scientifically trained fellows.

I am glad to be able to offer you the hearty coöperation of the National Research Council in any undertaking of soundly scientific character in which your Association and our organization can profitably work together. Indeed, I have in mind at the present moment a specific project of important investigation, the results of which may have a large significance and value in child health, and in which project our two organizations might well coöperate.

But whether we actually work together on specific projects or not, we have a common interest in the promotion of good child health and development which leads me to extend to you the National Research Council's cordial greetings and hearty sympathy, its congratulations for work done, and its best of good wishes for the continued success of your endeavors.

*Doctor Wood:* Out of a very interesting and unusual background of satisfactory experience, many years of which have been spent in the great oriental country which is now in convulsions, we have as the

last speaker a man who has had an exceptional preparation for the presentation of his subject, which is education in health. I am very glad to introduce Doctor Peter.

## EDUCATION IN HEALTH

W. W. PETER, M.D.

FOR the first time at an annual meeting of this organization, so far as I am aware, someone from China is present and has an opportunity to express the gratitude of many for the inspiration and practical help which we have received from you. Our debt to the leaders of the child health movement in this country is a very real one. Part of it is due to the very excellent material that we have had from you in times past. We are grateful for that. But our debt is deeper than that. You have helped us to develop new attitudes, and it is these attitudes for which we particularly thank you.

In the olden days in China it was always considered a great honor to be asked by the officials in the interior provinces to carry tribute to Peking, and Chinese history is full of the stories of those men who carried rice, porcelain and silk through the long canals until they finally reached Peking and the palace of the emperor, where they laid down the tribute at the feet of the Son of Heaven. I feel myself to-night, ladies and gentlemen, in the position of a tribute bearer. Of course, I do not bring rice or silk or porcelain, but I do bring gratitude.

In 1915 health education work was first undertaken on a comparatively large scale in China. But it was for adults. We did not think much about the health of the child. And until 1920 our program did not include much of anything for the younger age groups. Then, as a result in part of your influence and our own experience, we organized two new departments, School Hygiene and Child Hygiene. This was a most important and far-reaching step for us to take.

Education in Health! Just what do we mean by that phrase? Perhaps I can illustrate how fundamentally significant education in health is in our present social order.

When I was a boy in a country town in Ohio, a friend came to visit us from Toledo, twenty miles away. He came riding a bicycle,—the

first one I had ever seen. It was one of those early models with a very large front wheel, a high seat and a small wheel behind. Mounting and dismounting were accomplished by the use of projecting ladder steps. Not infrequently dismounting occurred suddenly without the use of these rear steps. As soon as I saw how much faster my friend could cover the ground than I could run, I wanted to learn to ride. Instruction was less necessary than courage, coördination, persistence and court plaster. To educate one's self in bicycle riding one does not need a teacher.

Some years later I underwent a second educational process in transportation. In a weak moment I was persuaded to purchase a motorcycle. Education was more difficult because of the presence of new elements,—carburetor, timer, generator, battery, ignition, clutch, gas and spark levers. To understand the proper use of these things I had to have instruction from one who had both technical knowledge and experience.

With these two educational processes to my credit, it was not difficult for me in similar fashion to add automobile driving to my list of accomplishments. Of course I had to have the help of a qualified teacher.

Then I went up in the air for my next educational adventure—firmly strapped for flying in all sorts of positions. But I never completed my course in flying. Airplanes are very complicated. There we have a mechanism that I am sure I could not understand at all. Well, I do not need to. I do not need even to understand all about a motorcycle or automobile, because there are experts who can do that. Of course, I do not need to know all about the human body. I can employ experts who do. But it does take more knowledge and training to keep the human body in the best working order than it does to operate an automobile or even an airplane. The body is quite different. In order to get the best results from the use of the human body, every owner should have knowledge and experience of its proper use. The owners of such other mechanical devices can put them in the hands of experts when they go wrong. Unfortunately, with the body you cannot do that. You have to stay with the thing while it is in the repair shop.

It is for this reason that education in health is of utmost impor-

tance. The life of the human machine is lengthened. The amount of work it can perform is increased. The repair bills are decreased. The time lost from incapacitation is lessened; and above all, education in health increases the size of the cup of happiness out of which all of us desire to drink. And the time to begin prolonging life and enriching life is at the earliest possible time—that is, with the child. Let education in health start there.

Perhaps you do not expect me to attempt developing the question of how this is done, but I cannot refrain from several comments. One most important way of achieving this result is by putting health teaching in education—really the reversal of the title. Then, the key people in the public health movement will not be only sanitarians, or vital statisticians, or any of the other units in a public health movement, vital as they may be, but also the teachers and the parents. Perhaps you have crowded the teacher into faster movement at the present time than you have the parent. But upon them particularly rests this problem in education.

The chief purpose of medicine is not to cure diseases, but to prevent them. Can we not take this same point of view into the field of education in health, and health in education?

One point of view is that each year we must go through with a certain quantity of material. Here we have hundreds of thousands of children entering the schools each year. Each one needs to have a physical and mental examination, and such correction of defects and treatment of remediable diseases as may be necessary. A certain quantity of work will have to be done every year. One point of view is never to rise above that, but just to look forward each year to doing this same amount of work, world without end.

The other point of view is that prophetic one which faces and which sees far into the future. I think Doctor Crumbine expressed that this morning in a most excellent fashion when he said, as I interpret what he said, that one of the chief purposes of the American Child Health Association is so to work as to make unnecessary the kind of work it is doing now; so that it may turn itself to other phases of the questions further down the road, in the light of the things that we do not now see.

There is such a thing as preventive health education so that we

shall not need to repeat all of the same work each year. There ought to be less of correction of defects, and fewer cases of remediable disease each year. That ought to be the prophetic vision that will stimulate us.

When I come to this country and see what you have done in contrast with what little we in China have done, I feel very proud to be one of you, even though I belong on the frontier. Watching those who gather from the four corners of this land to consider questions of common interest in a conference like this, there come to us moments of prophetic vision in which we see our concern the health and happiness of Everychild.

TUESDAY, MAY 10

*Morning Session*

*Presiding:* JOHN A. FERRELL, M.D., Director for the United States,  
of the International Health Board, Rockefeller Foundation

PROGRESS IN CHILD HEALTH AS VIEWED BY NATIONAL  
ORGANIZATIONS

National Health Council

WILLIAM F. SNOW, M.D., President

The American Junior Red Cross

MISS RUTH EVELYN HENDERSON, Educational Assistant to  
the National Director

The National Catholic Welfare Conference

MISS MARY E. SPENCER, Specialist in Health Education

The Child Study Association of America

MRS. SIDONIE GRUENBERG, Director

The American Federation of Organizations for the Hard of  
Hearing

MISS BETTY C. WRIGHT, Secretary





## TUESDAY MORNING SESSION

The session was called to order at 10 o'clock, John A. Ferrell, M.D., Director for the United States, of the International Health Board, Rockefeller Foundation, presiding.

The first paper for this morning is by Doctor Snow, president of the National Health Council who presents this paper from the viewpoint of the Council which is composed of the major national health agencies, of which the American Child Health Association is one.

## PROGRESS IN CHILD HEALTH AS VIEWED BY THE NATIONAL HEALTH COUNCIL

WILLIAM F. SNOW, M.D.

ONE way to view progress is to go back to some point in history from which we may gain a perspective and compare prophecy with fact through the intervening years. I do not propose to go back to the days of Spartan children; the years immediately following the World War afford a sufficient vantage point for the present purpose. In those years when Europe was struggling to survive the ravages and aftermath of war, and heroic efforts were being made to preserve the child populations of all the affected countries, particularly under the leadership of your President, Herbert Hoover, every nation became interested in reviewing the health status of its children and youth. Among the records of such reviews and pronouncements on essential and urgent needs of child welfare are the "Proceedings of the Medical Conference" held at the invitation of the Committee of Red Cross Societies in Cannes, France, April 1, 1919.

At this Cannes Conference were gathered a notable group of outstanding scientific medical, public health, nursing, and social welfare authorities from all parts of the world. Under the guidance particularly of Dr. Emile Roux, Director of the Pasteur Institute of Paris, who served as president; Dr. William H. Welch, Director of the School of Hygiene and Public Health, Johns Hopkins University, who was chairman of discussion; Dr. Richard P. Strong, Professor of

Tropical Medicine of Harvard University, who prepared and directed the program; and Mr. Henry P. Davison, Chairman of the Committee of Red Cross Societies, who organized and financed the Conference, this group examined past progress, present conditions, and future needs in the field of health conservation, and endeavored to state the great world problems of public health which had emerged from the war period. It is especially significant, therefore, that this body adopted as its second vote the following: "Resolved that the promotion of a wide extension and development of Child Welfare Work be selected as the first important constructive activity." This might properly be considered their first resolution, as the preceding one dealt with the control of typhus fever as an emergency relief measure.

If we turn to the report adopted and presented by the Section on Child Welfare we find such statements as this: "Experience has shown that no efforts in public health work produce more immediate and far-reaching results than those which are put forth in Child Welfare." The pressing problems set forth were:

- "1. To save the infants yet to be born and to promote their healthy development.
  - "2. To restore the health and make possible the normal growth and development of children who are now suffering from disease or defective nutrition and to safeguard the health of those whose nutrition has not yet suffered.
  - "3. To do something for the immediate needs of dependent children."
- Looking toward the more distant future, this Conference listed six fields of Child Welfare as highly important:

1. *Eugenic Considerations* affecting the prospective parents.
2. *Prenatal Period* in which the child is saved through care of the mother.
3. *Obstetrical Care* which saves the child from accidents during delivery; saves the mother from immediate and remote dangers of confinement; greatly increases the chances of successful breast feeding; and prevents much blindness.
4. *Birth to School Age Period*, which includes especially the first two years of infancy during which the child should be kept under continuous observation and supervision, and everything possible done by group instruction of mothers, individual

instruction, and home visiting by public health nurses or health visitors; the remaining years being similarly supervised through quarterly visits of the child to a Central Welfare station and at least a full medical examination once a year. The report says at this point—"by these means the beginnings of organic disease may be detected, physical defects and deformities prevented or corrected, and a general supervision maintained over the child's diet and general hygiene.

5. *The School Period* from six to fourteen years, during which the problem is to secure normal growth, physical and moral development, to recognize and correct defects which interfere with these, and to reduce to a minimum the risks of communicable diseases. The report at this point says: "The school physician, the school nurse and the school teacher all have important functions. Furthermore the school offers an opportunity, the value of which is only beginning to be appreciated, to interest, instruct and train the child himself in health matters."
6. *The Industrial Period* from fourteen to eighteen years, during which certain fundamental principles should be observed in protecting the youth. These principles are illustrated by reference to the necessity for physical examinations by competent physicians before permission to enter industry, and by emphasis on the prevention of a child's doing any form of work which interferes with his normal growth and physical development as determined by accepted standards and periodic examinations.

Thus did this world parliament of sanitarians in 1919 visualize the place and program of Child Welfare in health conservation. The past eight years have witnessed remarkable progress along all these lines of activity. Especially is this true of the United States. The leadership of the American Child Health Association in this field has been the outstanding factor in this progress, but it has been fortunate that this organization and the other national voluntary health agencies have surveyed the field together, studied their joint interests in the child, and developed coöperative relations in carrying on their activities.

*Doctor Ferrell:* The next paper on the program was to have been given by Mr. A. L. Schafer, Assistant National Director of the American Junior Red Cross, but the following note has been received:

"As the Mississippi flood situation has demanded the presence of Mr. Schafer, his place is to be taken by Miss Ruth E. Henderson. Miss Henderson is the Educational Assistant of the National Director of the American Junior Red Cross, and has been identified with the organization of the program for the schools, including health activities. Miss Henderson has been responsible for a considerable amount of the health material sent out through the American Junior Red Cross."

I take pleasure in introducing Miss Henderson.

## PROGRESS IN CHILD HEALTH AS VIEWED BY THE AMERICAN JUNIOR RED CROSS

RUTH EVELYN HENDERSON,

*Educational Assistant to the National Director, American Junior Red Cross*

THE topic, Progress in Child Health, gives me an uneasy feeling that I should talk only in terms of statistics, illustrated with up and down lines of various colors. Because I do respect such visible evidences of progress, our director of accounts kindly furnished me with figures about Red Cross activities in the field of child health. During the course of one year 18,464 boys and girls passed the Junior Life Saving Test; 28,041 school students earned certificates in Home Hygiene and Care of the Sick; 118,679 school students received regular Red Cross instruction in Nutrition. More than 1,000,000 school children were inspected by Red Cross Public Health Nurses. These figures represent the center of a much larger circle of instruction and preventive work in the field of child health, and they inspire with confidence.

My human interest has led in another direction. It has led me to watch a constantly more widespread awakening of public conscience in this problem of child health. This awakening has resulted from an unselfish coördination of effort on the part of all you lovers of children.

Because the Junior Red Cross operates through the school system, evidences of this interest most frequently reach us from teachers, in

requests for health material, for projects and programs. A brief note in one of our publications about certain health material available brought requests by the dozen every day for a period of two months. The teachers writing for that material were all doing something about child health and were planning to do something more. Their increasing demand for help led us, this past year, to provide a monthly page of health suggestions in a leaflet which goes to 150,000 teachers every month. This was an effort to meet a demand already created. All you who have been working for such an awakening have reason for gratification.

Human interest has led me to watch with even more pleasure an increasing responsibility on the part of children themselves; not merely for their own health, but a social unselfishness that makes them feel responsible for the well being of those around them. As many of you know, the Junior Red Cross emphasizes three things: One is "Service for Others." One is "Worldwide Friendliness." The third we call "Fitness for Service." When a child signs the membership roll, he pledges himself to help make these ideals real in his school and his community, and to work for these purposes with children in our own and other lands. His personal interest in health may be given new power, because he is no longer doing health chores by himself nor for himself alone. He is doing them with more than 5,000,000 young people in his own country and with some 10,000,000 young people throughout the world.

He becomes responsible for removing obstacles in the way of the welfare of other young people. For example, a class in the Boys' Latin School of Boston provided instruction in Home Hygiene and Care of the Sick for a group of Girl Scouts organized in one of the Continuation Schools of Boston. When a little girl in a rural school of Virginia was threatened with tuberculosis, every child in her school volunteered to bring one fresh egg each week, to make possible the diet prescribed by the doctor. The little girl got well. I don't know where the idea started that it would be a practical service for children to provide fresh eggs for patients. I do know that two years ago we quoted in the *Junior Red Cross News* a story of such an activity in certain schools of Austria, taking our story from the Austrian Junior Red Cross magazine. About a week ago a school from somewhere in

New England wrote asking for a poem that had been quoted in that story, because the children in the New England town were undertaking the same service for children in a hospital. And the latest number of the Junior Red Cross magazine from South Africa urged rural children to have laying hens, in order to provide fresh eggs for friends who were ill. Sometimes an activity is described in a letter going from one country to another as part of the international correspondence in which schools of 55 countries had a part this past year. Sometimes it is reported in one of the magazines now being published by the Junior Red Cross of 30 countries. It may be a simple, amusing activity, but if it has interest and social value, usually it proves contagious.

Another example was reported in the Junior Red Cross Monthly of Bulgaria. A school there elected its own sanitary officers, just as our schools here so often do. These sanitary officers looked after keeping the school clean, and the daily inspection for personal cleanliness. Somebody gave the school a baby pig. The children built a sty, reared the pig and sold it; and the money went toward a school bathroom where every child could have his regular bath. Now whether there will be a world-wide epidemic of raising pigs for funds to equip school baths, I do not know. It is possible. The story from Bulgaria ended: "In this way, through constant daily work, every member of the Junior Red Cross takes care of his own health and that of his classmates; for he knows the greater the coöperation that exists among people, the greater and more useful are the things accomplished and so life becomes happier and better."

Sometimes the sense of responsibility extends to the responsibility for the adult community and expresses itself amusingly. A little girl from a rural school in Kentucky wrote this letter:

"The Junior Red Cross,  
Washington, D. C.

Dear Sir:—I am interested in the Junior Red Cross and I want to help work, and I am writing to tell you to write me whenever you want something done. I am willing to work for the Junior Red Cross. I love to. A few months ago, a girl cousin of mine went to see a family where they never washed. They wore dirty clothes and we took them some clean clothes and they listened to us. And we are working to get them clean. And they smear paint all over their faces. Could not tell us some way to get them clean or something? Write soon."

Child health must include not only physical but mental and spiritual health. Here too the children help each other. A little more than two years ago, children of the Midwest were made homeless by a tornado that struck southern Illinois and other states. Even worse than their material losses was their mental state of terror and depression. To the comfort of those children went gifts and messages of love from other children in many parts of our country and from other countries as well. And the leaven of love working in their hearts brought them new health of mind and spirit. Last year they were writing to children of Europe:

"It is with great sorrow that we have read of the floods that invaded the many countries of Europe lately. We are in hopes that ready relief is at hand for the homeless and that no lives are lost. In our portfolio you will find some pictures showing the destruction caused by a tornado which destroyed three large school buildings and damaged five others. Many children whose work is in this portfolio had their homes destroyed and some of them lost their fathers or mothers or brothers or sisters. We take this opportunity of extending our heartfelt greetings to you, our foreign friends."

Last fall children of Florida cities suffered a similar terrible experience. To them, likewise, went messages and gifts from many children. And now, the children of Miami, Florida, have raised through their own efforts, \$1,000 for the relief of the child victims of this present flood! Reconstruction is only beginning to follow the emergency relief in this latest calamity, but already many children have taken a beautiful share in the amazing generosity of our country. And we know that once more in the rehabilitation of spirit which is one of our problems of child health resulting from this disaster, the love of child for child will do its work.

*Doctor Ferrell:* Those of you who have been engaged in recent years in the field of public health have recognized that the work in any community, county, or city, is nothing more than a reflection of the personnel that carries on the work. You have appreciated also the importance of adequate training of the personnel.

Some time ago the American Child Health Association inaugurated a program of training student fellowships for special training in the field of child health work. The first grant of this kind went to Miss Spencer whom we now have the privilege of hearing.



# PROGRESS IN CHILD HEALTH AS VIEWED BY THE NATIONAL CATHOLIC WEL- FARE CONFERENCE

MARY E. SPENCER,

*Health Education Specialist, Bureau of Education of the National Catholic  
Welfare Conference*

ALTHOUGH Catholic groups are usually considered very conservative they were not slow to recognize the value of child health work. There are to-day many Catholic organizations which are lending their support and coöperation to the child health movement, while a number of them are actually carrying on health projects. Quite often our educators are loath to undertake instruction in matters which are held to be primarily family and home duties, and for a time health training fell under this classification. This being the case one of the first tasks was to win the good will of the home toward school activities for the health of the child. In addition to this it was necessary to convince the school of its social responsibility in this matter of child health, and to arouse our social organizations to a sense of their opportunities and possibilities for coöperation in this movement for definite constructive health work. We feel that in all these lines there has been a slow, steady growth in both appreciation of health work and in the undertaking of health activities. While formerly our schools taught the traditional book physiology and hygiene they are now gradually inaugurating health programs of a more practical kind. At times it is a school here or there which has perhaps come in contact with a local tuberculosis association or a private health organization which undertakes the work. Again it is a whole diocese which adopts a course of study in health instruction in its schools on the advice of the Diocesan Superintendent who is keenly alive to the benefits of such work. In another section of the country the Catholic Women's Club or the Parish Parent-Teacher Association, as a result of its health study club, may have been awakened to the shortcomings of the school in regard to child health and consequently volunteers to finance medical supervision and the salary of the nurse for follow-up work. From

such a humble beginning the work may spread to the other parochial schools of the city or even the diocese.

Often the results are even more far-reaching. From just such beginnings groups of Catholic doctors and dentists have been interested in forming a volunteer group to care for the health and dental examinations of the parochial schools where such supervision has not been provided by the city health department. Other lay groups have created the demand for preschool health work, for special classes in parochial schools, for clinics for examinations and correction of defects and for school lunches. It is this gradual awakening here and there, first of this Catholic group and then of that, to the need and importance of health work that is the surest and most satisfying evidence that we are making progress toward better health for our children. In the limited time allowed it would be impossible to give a detailed picture of our progress so I shall only try to touch the high spots which I believe are indicative of a constructive child health movement under Catholic auspices.

We believe that while many forms of health work are being effectively carried on in our group, our school health work in the long run will be most productive of results. Since the National Catholic Welfare Conference has been primarily interested in school health work, I shall suggest some of its activities in the health field first. But it may be well as a preliminary step to say a few words about the National Catholic Welfare Conference itself, since our organization and its work may not be known to many who are here. The National Catholic Welfare Conference is the successor of the National Catholic War Council, an emergency organization created by the American Hierarchy at the time of America's entrance into the World War. Through the original organization the archbishops and bishops directed and inspired the services of American Catholics in war time activities. Its successor, the Conference, aims to unite and coördinate the forces of American Catholicism in peace time work in the fields of education, social action, immigration and various lay activities. The National Catholic Welfare Conference then, because of its central position and its national status, is well fitted to stimulate Catholic interest and action in all worthwhile national movements, and this it is doing for the health movement through its Bureau of Education, which stands in much

the same relation to the parochial schools of the country as the Federal Bureau of Education to the public schools.

We shall all subscribe, I am sure, to the belief that whatever is to become a part of the fabric of a nation will come most effectively through its schools. This is particularly true with regard to health work and for this reason we emphasize our school health work. You will appreciate the importance of our school health problem better if I make it more concrete. According to figures taken from the Directory of Catholic Colleges and Schools, there are in this country 7,300 parochial schools in which there are upwards of 2,500,000 pupils, taught by 55,000 teachers. In addition to these grade schools there are over 2,200 high schools with more than 200,000 students. Even a local group of parochial schools may be a problem in itself. When I say parochial schools you may be prone to think of your home town where there are two or three parochial schools, which may or may not be an influential factor in community life. The parochial school problem is better visualized in such a diocese as Chicago, where there are 319 Catholic elementary schools and 77 Catholic high schools, with over 175,000 children, or in Philadelphia where there are 243 elementary schools and 82 high schools, caring for over 120,000 children. In such a situation there are both difficulties and advantages. If we can interest the Diocesan Superintendent in health work the advantages are all on our side, since it is more than likely that all these schools can be interested in taking up the work. To convince these schools of the value of health work and to assist them in undertaking it, there is our problem.

The National Catholic Welfare Conference Bureau of Education has had since 1923 a division whose sole work is to stimulate the interest of these schools in health activities. Manifestly because of the great size of our system the Conference cannot work directly in the schools except for demonstration purposes. How then does it reach the schools? Sometimes through other organizations which are working directly in our schools and at other times through the teachers, through Catholic lay organizations and through the Catholic press. The National Catholic Welfare Conference health division carries on health work similar to that carried on by the private health organizations. The Council gives publicity to new movements in the health

field keeping our educators informed of health education developments, and prepares materials for use in the parochial schools where health work is being carried on by our own or by some other organization and it attempts to train our Sisters to carry on this work in the Catholic schools. The Council's teacher training is carried on largely through the diocesan institutes or annual meetings of all the teachers of a diocese held under the direction of the Diocesan Superintendent of Schools. Since 1923 such institutes have been held in Boston, Brooklyn, St. Louis and Syracuse. During the coming year similar institutes will be held in Louisville, Providence, Hartford and again in Syracuse, Boston and Brooklyn.

The Archdiocese of St. Louis holds annually a two-day health institute at which well known lecturers from various parts of the country bring new ideas and materials to several hundred teaching Sisters. These institutes usually feature also an exhibit of health materials and aids for health teaching. While Boston does not have an annual health institute it has had health lectures yearly at its teachers' institute since 1924. We also try to reach our teachers through their Motherhouses where the new sisters are trained and where the Sisters in Service return for summer work. A National Catholic Welfare Conference health worker has gone to these Motherhouses in various cities as far west as Minnesota. The interest of our colleges and teacher training institutions has also been aroused in the field and the following schools have offered or are now offering courses in Health Education for Sisters: The Catholic University, Washington, D. C.; Fordham University, New York City; Loyola University, New Orleans, Louisiana; Creighton University, Omaha, Nebraska; St. Louis University, St. Louis, Missouri, and Notre Dame University, South Bend, Indiana. The National Catholic Welfare Conference has had charge of this work at the Catholic University where it has aimed to set the standard for other Catholic Institutions by conducting a demonstration health class in connection with its course for teachers. This class served also as a practice class for the teachers taking the health education course. Last year this class was made possible through the National Tuberculosis Association and the coöperation of the American Child Health Association.

But school interest without home coöperation is futile. To secure

the interest of Catholic parents in better health for their children and especially in carrying out at home the health teaching of the school, health articles of interest to mothers and parents are syndicated weekly in forty-two diocesan Catholic papers in this country and in two in Canada. For the same reason Catholic women's clubs and members of the National Council of Catholic Women are urged to form health study clubs and material for the use of such groups is prepared here at national headquarters by the health division. Thus we hope to interest and educate the parents to their responsibility in the program for child health.

Now with regard to the actual working out of the health program in our schools, it has been found through a study we made recently that practically all our schools, especially those in and near the large cities, have at present some form of medical inspection. In many instances this supervision is contributed by the Board of Health, as in New York, Boston and Philadelphia. In other instances it is paid for through parish assessment from a central Catholic education bureau as in St. Paul and Minneapolis. In Portland, Oregon, the Archdiocesan Council of Catholic Women finance the medical supervision and a dental clinic for parochial school children. In New Orleans a number of groups coöperate in the health program. The work was introduced into the parochial schools there on the suggestion and interest of the local Council of Catholic Women who bear part of the expenses. The physicians contribute their services and the salaries of two nurses are paid by the Community Chest. Members of this women's organization care for the clerical work connected with the examinations and weigh and measure the children. This work is carried on in both the white and colored schools. A city-wide recreation program has been in the process of development in New Orleans for the past two years. This includes games, sports and athletics for all Catholic school children. The work is in charge of a city supervisor of recreation whose salary is paid jointly by the Associated Catholic Charities and the parochial schools. Some health instruction is given in the schools and the next step for this city will be the introduction of a unified course in health instruction in all the grades.

This piece of work just cited is typical of the way in which our diocesan health programs develop. There are any number of similar

cases where the health programs of the Catholic schools are in such a developmental state and where one or the other phase of health work is being developed slowly but thoroughly. We encourage our schools to start the work wherever local interest seems to center or with whatever kind of work seems to be in greatest demand. For example in San Francisco our schools have had for a number of years adequate medical supervision. The next type of work developed there was that in nutrition. It grew out of the discovery of the widespread existence of malnutrition in the local schools. There are now 45 parochial schools in San Francisco in which nutrition work is intensively conducted. In 36 of these schools a teacher is subsidized to assume special charge of the underweight children. In the remaining six schools a full time nutrition worker has charge of the work. All underweight children are referred to these classes. During the year 1925, 3,868 children were under observation in 74 such classes. In addition to the traditional kinds of health work, San Francisco has made special provision for sub-normal children, its course having been planned under the direction of Thomas Verner Moore, M.D., our well-known psychiatrist.

Similar work has been developed in St. Louis and in addition milk stations have been opened in the parochial schools there by the Mothers' Clubs and the Council of Catholic Women. The work as carried on in this city exemplifies very well the development of a Catholic school health program through the coöperation of many agencies. The work was originated by the local tuberculosis association in 1921. They supplied the parochial school health worker who has worked in over 80 schools there. The nutrition program was the joint work of the Tuberculosis Association and the St. Louis University Medical School. A group of Catholic dentists have volunteered their services for the dental program. They are known as the Parochial Dental Welfare Association. The International Federation of Catholic Alumnae has sponsored and financed a Sight Conservation Class for St. Louis parochial school children, while an open air school was opened through the activity of the Diocesan Council of Catholic Women. From year to year the work in St. Louis expands and develops, which is the best evidence of a growing appreciation of its need and worth. This year the program has been extended to the high schools and a Catholic

School Health Bureau to care for all Catholic school health work in St. Louis is under consideration. When the program is developed further so that it will include a systematic course in physical education for all schools St. Louis Catholic schools will exemplify a well rounded school health service.

Still another type of approach is seen in our Syracuse schools where the work was undertaken by the Milbank Demonstration. It is our sincere hope that through the Demonstration the schools will be convinced of the value of health work and will incorporate into their program and services the various types of health service as carried on under the Demonstration.

To cite just one more type of school health work, this time from the college field, since there is a growing tendency on the part of our colleges and universities to pay more attention to the health of their students through providing better health supervision and instruction. One of the best examples here is St. Louis University, an institution with an enrolment of about 2,700 students. The "Student Health Service" was established there about two years ago as a sub-department of the Department of Medicine. Its functions are briefly: (1) to give physical examinations to all new students in the University; (2) to give advice to students on all questions of health; (3) to encourage healthful habits of living in so far as this is possible by personal contact with the students; (4) to follow those students whose health has been found impaired, and (5) to supervise the hospitalization of students. Other colleges, notably those for women, are placing their dining rooms in charge of trained dietitians and through daily provision of more healthful meals they are aiming to educate their students to better food habits.

These few instances<sup>\*</sup> are typical of the ever growing appreciation and activity of the Catholic schools in various kinds of health programs. You will notice that much of this work has been due to the activity of our lay groups such as to the Councils of Catholic Women, the Parent-Teacher Associations, and the Mother's Clubs. These have also sponsored other types of child health work as clinics for mothers, for infants and for well babies as well as the preschool round up and other well known national movements. The international Federation of Catholic Alumnae, which took a very active part in the St. Louis

school program outlined above, is a nation-wide organization of the alumnae of our Catholic schools as its name indicates. Many of its members are volunteer workers in the health program outlined by this organization, which includes infant, preschool and child health work.

One of the most interesting pieces of health work carried on under Catholic auspices is that carried on by the Catholic Rural Life Bureau in the Rural Religious Vacation Schools. Such vacation schools have been established in the last five years in twenty dioceses in the United States and thousands of boys and girls attend them daily during the months of June and July. While they have been established primarily for religious instruction, their daily program now includes a period for health instruction and a period for recreation and games. Through such contacts with the children Catholic rural health work received its impetus.

There is also a growing tendency on the part of our Social Service and Associated Charity Organizations to give more attention to child health in their programs. A recent social survey of the Brooklyn Diocese carried on by our Social Action Department, and a similar one of the Newark Diocese, included an investigation of children in parochial schools in need of special care and of the parochial schools' use of community facilities for the assistance of such children. In the recommendations of the survey the part dealing with child caring institutions and boarding homes recommends physical and mental examinations, adequate recreation and better supervision of diets for all children. This is typical of the importance our social agencies are attaching to the consideration of the health of the child.

The Directors of the various Bureaus of Catholic Charities, realizing that any measures which will help to reduce illness and dependency will aid in the solution of their problems, have been earnest advocates of school health work and in some instances they have created the demand for it or have inaugurated it. In their own particular field they have consistently demanded higher health standards in the various charitable institutions and training schools. As a result complete physical examinations and mental tests for admission are the general rule. The inmates are vaccinated against smallpox and typhoid and the Schick test and toxin anti-toxin treatment are given. Routine examinations are the standard toward which they are working and in



many institutions clinics are held regularly for the correction of defects. This tendency of the Bureaus of Charities to give more and more attention to the health of their charges is well summed up in a recent article by the National Director of Catholic Charities, who calls on the institutions to recognize the need for a modern health program for their children. He insists on the thorough preliminary medical examination and subsequent yearly examinations with provisions for remedying the defects found. He also stresses the need for an organized recreational program and the employment of recreational leaders.

These instances while far from being exhaustive are typical and will, I trust, give you a cross section of Catholic activities in the modern child health movement. We have not attained our goal but it is ever before us and we are moving slowly but surely towards it. In the four years during which the National Catholic Welfare Conference has carried on its health activities a noticeable change in the attitude of our Catholic leaders and our Catholic groups toward health education has taken place. And once they are convinced of the value of health work it is but a question of time before they inaugurate health activities on their own initiative. The success of the movement thus far augurs well for the future. From now on we hope to develop our work not only extensively but also intensively in all the recognized fields which are conducive to health for all our children.

*Doctor Ferrell:* We are fortunate in having an opportunity to learn from Mrs. Gruenberg something of the work of the Child Study Association of America.

## PROGRESS IN CHILD HEALTH AS VIEWED BY THE CHILD STUDY ASSOCIATION OF AMERICA

SIDONIE MATSNER GRUENBERG,  
*Director, Child Study Association*

I FEEL very much like a fish out of water at this Conference, because the history of the Child Study Association, in its work and approach, is so totally different from that of the organizations about which we have heard, and yet the work of the Child Study Association

is in reality closely related to all the health activities. I might say at the beginning that the history of the Association, in its start, in its conception, has been different from that of any other association, in that it was not organized by a group of experts to launch a program for the lay public, but was organized more than a generation ago by some very humble lay parents, who felt the need for expert knowledge in what they considered a very important task. So, from its little beginning, this group has grown, always with the need of parents themselves as the leading initiative in the work. There never was a set-up program before the real necessity was there. No outline or program of study was ever conceived in advance of operation. It was always drawn up out of the very needs of the people. Therefore, if you think of the work from that point of view, it will perhaps help emphasize the point I am trying to make.

If it were not too long, the name should really be "Association for Child Study and Parent Education," because the efforts of the Child Study Association address themselves primarily to parents and to those who work with parents.

A considerable number of those who are reached by our educational activities are practically without any clear or organized knowledge regarding the essentials of hygiene for children.

To such parents it is necessary to bring specific instruction regarding the physical care of children, the principles of diet, cleanliness, sleeping and clothing, light and air, and so on. In increasing numbers, however, the parents whom we reach come already equipped with a considerable body of sound information regarding these matters. The various officials and volunteer agencies that have been for the past year translating scientific knowledge into the language of the people have effectively disseminated important facts and principles, and are progressively reaching more and more of the population. Our distinctive problem is to help parents make use of this important information and to apply it effectively in the case of their own particular children. It appears when we look into the matter, that it is one thing to accept the doctrine that an afternoon nap sweetens the child's disposition, for example, but a totally different matter to get the child to accept the nap sweetly. We are concerned here with the problem of managing the

child's impulses and desires quite as much as with the one of knowing what is good for his health.

Useful information about the conditions necessary for health, like useful information about other practical arts, has come to us in scattered fragments. At one time we discovered the importance of calories, at another time the importance of sunshine; one day we are alarmed about the danger of chronic fatigue, the next day we are alarmed about thumb sucking; now it is vitamins C or D, then it was the mystery of intestinal flora; and these facts, as we get such knowledge, we want to put to work piecemeal. The result is that we treat the child as a composite made up of numberless independent variables. We try to make the most out of each item, but we rarely discover that unity which is the essential characteristic of life itself and the indispensable condition of the health which we are trying so hard to secure.

Our aim is not to minimize any of the numberless details that new knowledge emphasizes, but to fix attention upon the need for a technique of focusing upon the child the benefit of the very specialized knowledges. Parents have to be helped to the technique of managing their children so that the latter will establish health habits without becoming too self-conscious, too much aware of the importance of health, too much concerned with the significance of each detail of the ritual we want them to follow.

Many of the habits we seek to establish during these years are acquired easily enough if they are a part of the colorless routine of everyday life. In so many cases that come to the clinics the ignorance of the parents is an obvious factor; but in many cases the trouble comes from the mother's knowing something that her mother did not know, and the mother having more time to fuss with the one child than her mother had to give to a whole brood.

Not only increased leisure, but other changes in our ways of living, have modified the attitude of parents toward many details of life and toward their mates and their children. These attitudes color what we say and do to one another and to the children, so that we unconsciously work upon the feelings, the desires, the aversions of the children, and that in ways which influence their health and their conduct.

We have to learn, then, in addition to diet and rules and tables, to cultivate a certain casual manner in handling everything connected with

the routine of the day's living. We must be friendly, to be sure, but we must also affect indifference regarding a thousand important details. In a nursery school the teacher in charge has to deal with the activities of the day's living in an impersonal way, without emotion. That makes it possible for the children to do here what their mothers have such difficulty in getting them to do at home, whether it is eating carrots or going to the toilet before it is too late, or washing their hands, or saying "thank you." The children do indeed need affection, and they need attention, if they are to be well and happy; but they do not need to have their feelings attached too firmly to those things that must be accepted as matters of course—the things that should be done automatically to keep us alive and well. The child should eat and he should eat in accordance with the best knowledge of the nutrition laboratories; but he should not eat in the presence of a personality charged with emotion, watching every move and counting the calories.

Health habits should be the unconscious habits of healthy living, acquired as simply and as unquestioningly as habits of wearing clothes, or sleeping in bed, or being polite, or using the mother tongue. The child needs to know nothing of the philosophy or of the importance of these habits. He gets them because they are parts of his living environment, the way in which those around him live and act. It is important for the adults in the child's immediate surroundings to understand what kind of living is healthy living; but it is far from necessary for them to raise with the child an issue as to which articles of diet or which details of routine he will or will not accept.

Malnutrition or 'chronic fatigue is not confined to the so-called "underprivileged" child. The practical problem of the parent who is conscientiously trying to apply what the various specialists teach about health commonly takes the form of overcoming the child's obstinacy or perversity and perhaps the most frequent difficulty is associated with eating. It may be resistance to a particular kind of food, or the refusal to eat alone; sometimes there is difficulty only in the presence of a particular person; sometimes a particular person has to be pressed into service to make a meal passably satisfactory. Why does a child so often pick for his special dislike upon the very things that the dietitian strongly recommends? Unquestionably it is in most cases precisely because the mother's solicitude attaches to the spinach or egg that

excess of emotion which gives the child his opportunity to convert the commonplace breakfast into a thrilling adventure.

We have an excellent example from Doctor Thom, of a Massachusetts family consisting of an educated mother, a well-meaning father, an intelligent child of two and a half to three, and one younger child. The parents here tangled up their feelings with their knowledge and good intentions until all concerned suffer in health. Every meal is an event—yes, an adventure—for there is no telling what the outcome will be. The older child will sit tight until the mother places the food in her mouth; then she will hold the food, but not chew it. In the end, the mother is exhausted and at the end of her resources. What help does she get from her eager study of diet? There is certainly much more that she needs to know, if she is to keep her child well, to say nothing of getting her into habits of health. The father and mother do not agree on the first principles of discipline. When the mother has the child in hand and makes requirements that the child does not meet, the father takes the position, "What can you expect of a little child like that?" When it is his move, however, and he finds himself equally futile, his reproach reads: "Why don't you train her better? You have her all day." Practically every normal child would much rather go hungry than miss a show like that. The conflicts do not make for either health or happiness; but they do give a thrill to life.

Another example of feeding difficulty is interesting because it shows what can be done when the child is treated as a whole. A little girl of three was refusing to eat her breakfast. The child was in good health and emotionally well adjusted. She had never given any trouble before, with any of her meals, and she was getting through with lunch and supper without any trouble at all. Her unwillingness to eat breakfast came on with comparative suddenness. She now required hand feeding, conversation and cajolery, and sometimes these did not suffice. If left to herself she would cry, or call for the nurse to feed her, or leave the food entirely untouched. No questioning could bring out the difficulty, although the parents were convinced that the child had something in her mind because the other meals caused no trouble and because this behavior was so out of keeping with her previous conduct. A careful examination brought out the fact that the child had been recently taken out of the high chair for her lunch and supper, but not

for breakfast. She was then asked how she would like to sit in a big chair for breakfast, and she immediately showed delighted eagerness and began to cast aspersions upon the baby chair, about which she had not once complained during the trying days of tragical breakfasts. There was no further difficulty with breakfast, when the child sat in a big chair; but apparently she had been affected by the implications of the high chair without being able to voice her grievances. Incidentally, I say that the parent who discovered the hidden source of the child's troubles in this case had obtained a large part of the insight into childhood through the assistance of the Child Study Association. The normal reaction of most parents in similar situations seems to be to look for, or try to overcome, "naughtiness" and "perversity."

This case illustrates the point that we cannot take one part of the child's training as a separate issue. If these parents had not been trained in looking at the child in all its aspects, a series of penal situations would have started with the child's refusal to eat breakfast. She would have been punished for not eating, which probably would have resulted in her not eating lunch, and nothing would have been observed about this trifling difficulty, which might have serious effects.

Another type of health disturbance for which we commonly seek exclusively physical causes and remedies is illustrated by the child who was left at home with her father while the mother was at the lying-in hospital. The child developed a fever, but the doctor could find no excuse for it. When the child was taken to the hospital to see the baby brother, when she was given the undivided attention of her father, when she discovered that the baby about whom there had been so much talk and excitement was really a very insignificant affair, the temperature dropped to normal. In other words, the rise in temperature probably indicated an emotional agitation which was not obvious to the casual observer and which was related entirely to fears and misgivings, or to a feeling of insecurity due to the advent of the little stranger who took everybody's thoughts and attentions away from what had been hitherto the center of attraction.

It is to help parents to an understanding of situations of these types and other related ones that the Child Study Association of America directs its program. Mothers—and, increasingly, fathers, too—come together in the study groups or "chapters" of the Association for the

full discussion of problems which arise in the course of their living with children. The problems which they bring vary from seemingly trivial irritations that come in the daily routine, to the more serious behavior difficulties which have, perhaps, grown out of the mismanagement of a minor situation. Through their study and discussions, through interchange of ideas and the pooling of experiences, these parents are helped not simply to the solution of immediate problems, but to a deeper insight and a better skill in the continuous management of children at home.

The headquarters of the Association are in New York, and in New York the Association has set up a demonstration program of study groups which address themselves to every type of parents. If the student comes to investigate the methods and technique used by this Association in parental education, we are able to take him in the course of a week to a Harlem group of colored mothers, to different churches and institutions, where there are parents on every level of social and educational development, and even over to Park Avenue, where for the past two years we have conducted a group among those who, for want of a better term, might be designated as the over-privileged group. We were told that that particular class of society was immune, and that they needed very specialized handling. I personally led that group for two years, and am ready to go on for the third year, and I find that they are very much maligned, that they have the same interest in their children that all other parents have, and that the same method applies, the vocabulary being slightly different. In the study of groups as they are arranged, the parents are divided according to the ages of their children. Taking a very homogeneous group of parents, they may first study the health side of the training of young children, and all the emotional and psychological questions involved, then the pre-school child, then perhaps the school child and on through adolescence.

The outlines which are used grow out of the work itself. In addition to serving the parents in the immediate vicinity of New York and New York itself, these groups are used for observation and training centers for students who are preparing themselves for work with the parents. At the present time we are coöperating with Teachers College in giving a course in parental education in which there are thirty

students, coming from the fields of public health, home economics, and so forth, preparing themselves to be specialists in parent education. To be a specialist in parent education you have to give up being a specialist in one branch. It is a specialty involving all the other sciences, and while each parent educator, so to say, cannot be a specialist in all the branches of science, he or she must possess a basic amount of psychological information. One feels that the effect of coördinating the different sciences in a way to focus them on the children—which is our primary concern—will have a very beneficial effect on the institutions concerned. When all different specialists begin to focus on a common problem we shall have taken a great step toward unifying the knowledge which, up to now, as I pointed out before, has come to us in fragments.

The training of children to healthy living must await the education of adults to the effective management and guidance of children. There are involved not merely schedules and calories, rules and vitamins, but also an understanding of the so-called disciplinary problems, the motivations of childhood from stage to stage, the forces that modify the child's likes and dislikes as well as the changing values and aspirations.

The vast accumulation of details which to-day represent the sciences of physiology, chemistry, psychology, and so on, includes many facts that bear directly upon the maintenance of health and bodily and mental vigor. These facts about the child's nature and his development, like the detailed knowledge in other fields, have come to us through the researches of many specialists, each attempting, as some clever observer has already noted, to find out more, and more, and more, about less, and less, and less. As soon as a specialist establishes a fact that seems to us important, we rush to put it to work. When we are dealing with children this eagerness to apply new knowledge often produces the result of departmentalizing the organism in a manner that contradicts the first principle of being alive and well, that is, whole. We not only refuse to let the right hand know what the left hand is doing, but often let one hand undo completely what the other is doing.

However valuable specialization may be in research, we surely know enough about life to-day to recognize that we must deal with the child as a living unity, that we must coördinate for his welfare the many useful things we have learned, and not merely apply them as though



they had nothing to do with one another. The Child Study Association of America seeks, accordingly, to help parents approach the problem of physical health through an understanding of the basic factors supplied by physiology, psychology and the intensive study of child behavior. We try to help the parent to think of the child at all times as a whole and not merely a collection of structures and peculiarities and puzzles that happen quite casually to be inside the same skin.

*Doctor Ferrell:* In a study of the child, inspiring as it is, no feature is more interesting or of more importance than a study of the child who had a physical handicap. The development of instruction, courses of training and encouragement calculated to enable a handicapped child to overcome the handicap and to be self-supporting, and to be useful, and to take his place along with those without handicaps, is one of the most interesting and inspiring activities in which the child welfare work is engaged. We are fortunate, therefore, in having a paper this morning by Miss Wright of the Federation of Organizations for the Hard of Hearing.

## THE HARD OF HEARING CHILD IN THE PUBLIC SCHOOLS

BETTY C. WRIGHT,

*Secretary, American Federation of Organizations for the Hard of Hearing*

I FEEL highly honored to be present at this fourth annual meeting of the American Child Health Association. I bring to you greetings from my own organization, the American Federation of Organizations for the Hard of Hearing, and extend to you a cordial invitation to visit our eighth annual meeting to be held in Chautauqua, New York, June 27 to 30.

The Child's Bill of Rights, prepared by your president, Mr. Hoover, has been read all over the country. All lovers of childhood believe that it should be followed as an ideal; that an observance of the principles outlined in this brief but masterly document would make the future of our country bright.

There are, as you know, many organizations interested in the welfare of children. Some of them are specific in their aims. The aims

of your organization broadly include the aims of all of them. My own organization lays stress upon the prevention of deafness. If in our zeal we should sometimes seem to fail to see the whole forest because of the trees in our foreground, please forgive us, because most of our members realize what it means to be under the shadow of deafness and are determined that no child shall have our handicap if we can help it.

Since the promotion of child health is a work in which all organizations interested in the welfare of the child can have a part, we can coöperate and work toward the ideals outlined in the Child's Bill of Rights. Then out of the melting pot of our combined specialized research and experience, there will arise a concrete working program that will give every child in our public schools a fair chance to be free from physical handicaps. My own organization can contribute to this melting pot, I am proud to say. Whatever we have found out about the hard of hearing child and his problems in the brief period of our existence, we gladly share with you.

In the fall of 1924 a Committee was appointed by our Federation to find out what had been done for the hard of hearing child in the public schools. This Committee found that, prior to 1916, practically all hard of hearing children, who were discovered, were sent to special schools for the deaf, because there was no place for them in the public schools. Many of them did not belong in schools for the deaf. There is a distinct difference between the deaf child and the hard of hearing child. The deaf child has to be taught not only how to speak but how to use words to express his thoughts. When he first goes to school he does not know the names of objects, in fact he often does not know that they have names. Language comes to him slowly; he is likely to use English such as a foreigner uses. The slightly hard of hearing child has normal language. He can hear the voices around him; at times, he can hear an entire conversation without much effort; at other times his hearing is not so good; he hears sounds, but the words run together. He should be taught lip-reading along with his regular studies, growing up in an atmosphere of normal speech and language.

The deaf child's problem can be met with proper educational methods; the problem of the hard of hearing child is two-fold, that is, educational and medical. In the case of the deaf child, there is little

doubt about his discovery. His evident deafness safeguards his education, usually. The sadly neglected child is the one with defective hearing who is hidden in the huge mass of public school children with normal hearing. This child has often been rated as stupid and dull when in reality he is hard of hearing. Because he can hear without effort on the noisy playground and then fails to answer at times in the quiet schoolroom, the teacher thinks he is inattentive.

May I tell you a true story about a hard of hearing child who was undiscovered?

Mary was apparently a perfectly normal child. She loved all kinds of games and was a favorite with the children. When she went to school she found that she was in a different world. She didn't like it at all except for the hours of play with her classmates. She dreaded to get her monthly report because her grades were always the lowest in the class. She tried very hard to keep up but she was always behind. After a while she was dropped and found herself in a class with children much younger than she was. This humiliated her and she began to wonder why she hated language, geography, history and spelling, and why the teacher was always telling her that she did not pay attention.

After awhile Mary was sent to another school. She knew it was because she was failing in her studies. Here she found that the subjects were taught by lecture and the students had to take notes. When she compared her notes with those of her classmates she saw that they had things of which she had never heard. Her friends told her that the teachers had said these things in the lectures.

Finally Mary thought that she must have some terrible brain trouble. She did not want to tell her mother because she knew it would grieve her. So she kept her fearful secret to herself and cried herself to sleep every night. It was not until she was seventeen that she began to think that her hearing might be impaired. At her own request, she was taken to a prominent otologist, a friend of the family. He found out at once what the trouble was and marvelled because Mary's defective hearing had not been discovered before. He reassured her when she asked him if she were stupid and advised her to learn to read the lips. To-day this young woman is one of the outstanding leaders in work for the hard of hearing and has accomplished

a great deal for their welfare and happiness. She was an undiscovered hard of hearing child.

If we accept the opinions of leading otologists and acoustic engineers, there are 3,000,000 children in the public schools of the United States to-day who have hearing that is more or less defective. At the present time a large number of them are not experiencing any handicap, but if proper medical treatment is not given in time, the future will find them handicapped by their deafness.

What is to be done to safeguard our children against deafness and to conserve the hearing that is educationally their most precious possession? Why are there 3,000,000 children (this is a conservative estimate) with defective hearing? Most cases of deafness can be traced to the after-effects of scarlet fever, measles, diphtheria, mumps or frequent colds. In the fifty-five organizations for the hard of hearing all over the United States and Canada, I venture to say that at least 50 per cent of the members can trace their deafness to the effects of these diseases. Even the child whose hearing is "threatened" by heredity or by pathological conditions stands a good chance of never being really handicapped by defective hearing if he can be safeguarded against "childhood diseases." An adequate health program should emphasize treatment for all children who have conditions in their noses and throats that may lead to deafness later on.

Much is being done for the health of our school children, but in my field work I have seen health programs that have been adopted by school systems and have been saddened to see how little attention is being paid to careful examination of the hearing of our children. I have read with interest "A Health Survey of 86 Cities," prepared by your Association. Only 9 cities out of the 86 have classes for deaf children and for the conservation of hearing. No mention is made of lip-reading for hard of hearing children. Twenty states in our union require annual health examinations, but much of the testing is superficially done because of negligence or the lack of proper equipment, and as far as deafness is concerned the results are negligible.

Eighteen years ago, Franklin W. Bock, M.D., of Rochester, New York, opened his clinic for the prevention of deafness. So far as we know this was the first clinic of its kind in connection with the public

schools. Not only did he fight deafness that was evident, but he fought potential deafness, that is, he examined hundreds of children who had conditions in their noses and throats that would lead to deafness later on. He has proved in his clinic that deafness can be prevented. A clinic for the prevention of deafness is the first line of defense. In view of the fact that eighteen years have passed since the establishment of Doctor Bock's clinic, it is discouraging to think that so few clinics in connection with the public system are in existence at the present time.

Horace Newhart, M.D., says: "Probably the most neglected organ in the body, when we consider its importance from an educational and economic standpoint, is the ear." This organ has been neglected in the past because of the enormous amount of time needed to make accurate ear examination, and the indifference in regard to ear diseases. Doubtless many of you remember having earache in your childhood and smile at the old-fashioned remedies that were used. Many a hard of hearing person of today can remember them. Though he does not blame his parents for apparent neglect, he is thankful that the children living in the present age have more medical advantages than he had.

The Federation feels pardonable pride in the fact that the Bureau of Education of the Department of the Interior has given its coöperation to our cause. Because of a request from this Bureau, a national commission of experts, consisting of a physicist, a medical inspector, an otologist, and a teacher of hard of hearing children, was appointed to find out the best means of detecting impaired hearing in children, the best means of giving such children medical treatment, and the best means of giving such children the proper educational treatment. The report of this Commission is now in the hands of the Bureau of Education and we believe that the recommendations outlined therein will ultimately reach and benefit the children in our public schools.

A few years ago it was not possible, with the methods existing then, to examine the hearing of children at a faster rate than twelve to fifteen an hour. Obviously that is one of the reasons why the hearing of school children has been neglected. Now with the new phonograph-audiometer, known as the 4-A audiometer, it is possible to test 120 to 150 school children over eight years of age per hour, at a reasonable expense.

This apparatus consists of a portable case, with five distributing trays, each containing eight receivers. One ear of each of forty children can be tested at one time. These trays are connected by electrical conductor cords terminating in plugs. Each child to be tested is given a pencil and a printed sheet and is told to put the receiver to his right ear and write down the number that he hears. The phonograph is then started and a woman's voice is heard giving numbers that uniformly decrease in intensity of sound until the voice is no longer audible to the human ear. The test is given twice by a woman's voice and then twice by a man's voice. The receivers are then changed to the left ears and the test is repeated. The papers are corrected with a master sheet and the hearing loss recorded. In the higher grades the loss of six sensation units \* is considered significant, but in the lower grades the limit is found to be 9 sensation units. Nine sensation units is used as the basis for determining those to be classified as hard of hearing. This group test audiometer is impractical for testing the second grade and below. Borderline cases can be checked up with the use of an audiometer for individual testing.

Thousands of children have been tested, within the last year, by this phonograph audiometer. It has the advantage over all other kinds of group tests in that records can be standardized and comparisons made from year to year. Right here we should like to stress the necessity for annual ear examinations. We must remember that there are untold thousands of children who, although not hard of hearing this year, may have defective hearing next year. Deafness is stealthy in its approach and we must be on our guard.

In making a plea for careful ear examinations of children in the public schools, many obstacles are encountered, and we frequently hear, "We have no time to make such examinations; the cost of the equipment is prohibitive; we cannot burden the taxpayers further." To which we can reply: "It is economically sound to test the hearing of all school children with the modern equipment now available." Since more than a million children fail to make their grades each year, it is reasonable to infer that a large percentage of them are hard of hearing.

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\* Sensation units is a technical term which means that those who cannot hear speech until the speaker comes closer than eight feet are considered to have normal hearing.

We find that hard of hearing children repeat three times as often as other children. However, all hard of hearing children are not backward. But when they keep up with their grades they do so at the expense of tremendous nervous energy unless they have training in lip-reading to help them. Doctor Bock has kept careful records of his work in Rochester and finds that out of 349 hard of hearing children, 138 were up to grade; 211 repeated a grade 441 times at a cost of \$60 each time, making a total of \$26,460. Think of the tremendous economic loss to the school system. Children who repeat take the space that should properly belong to children promoted. In cities where there is a dearth of school-room facilities this is an important phase of the problem. These repeaters also delay the day when they could be self-supporting.

Deafness often varies with locality. In a foreign section in one of our cities, 25 per cent of the children had defective hearing. In a section where the economic conditions were better, 15 per cent had impaired hearing; only 10 per cent were found in a still better section. In an expensive private school, where the children had the advantage of expert medical care, only 2 per cent of the pupils had defective hearing.

Though it is appalling to think that 12 to 15 per cent of the children in our public schools have defective hearing, yet it is encouraging to know that a large per cent of these can be saved from deafness, if they receive the proper medical treatment in time. When the hearing tests are recorded, the children in need of medical treatment should be treated in the school clinic or special clinics or dispensaries, or should be advised to go to an otologist for a careful otologic examination. The children should be classified as slightly, moderately and severely deafened and the coöperation of the teachers should be obtained in seating them where their hearing can be used to the greatest extent and where they can easily see the teacher's lips.

There are many thousands of children who have been caught in the web of neglect. They are facing progressive deafness and many of them will become severely hard of hearing adults. Their hearing should be conserved; they should be taught lip-reading.

We turn again to the pioneer city, Rochester. The first lip-reading classes for hard of hearing children in the public schools were started there in 1916. In 1917, a class was established in Lynn, Massachu-

setts. To-day 26 cities in the United States and 2 in Canada provide lip-reading instruction for their hard of hearing children. You may wish to know how these classes in lip-reading are being conducted. The teachers, specially trained for this work, usually go to schools in congested areas where the children meet them twice a week for their lessons in lip-reading. Then the pupils go back to their regular classes with the hearing children. (It may interest you to know that teachers of lip-reading are being trained in Brooklyn, Boston, Berkeley, California, Baltimore and Ypsilanti, Michigan.) Every teacher of lip-reading believes in miracles. Some of them say: "I have seen dull, listless, inattentive children become happy, animated little human beings." "It is marvellous to see the change in Mary since she has learned to read the lips. I can't realize she is the same child." Lip-reading or speech-reading is a marvellous thing. It is a crutch that should be given to every child who is handicapped by deafness in any degree. Some one has said that this great lip-reading movement has gone beyond our own country and is on its way to encircle the globe. It is one of the romances of the educational world.

In comparing the work for the hard of hearing twenty years ago with the work of the present time, we have reasons for feeling optimistic. Twenty years ago there was no organized work for the hard of hearing. To-day there are fifty-five organizations in the United States and Canada. Many of them have been instrumental in arousing school officials to the needs of hard of hearing children in their midst.

Our ultimate goal is the prevention of deafness. Is it not worth striving for? "Childhood deafness is often adult tragedy." Should we not try to avert it?

To prevent deafness and to establish classes in lip-reading, parents, public health workers, social workers, physicians and organizations interested in children should work together. It means justice to hard of hearing children, yes, and mercy, too. Even now thousands of children are being subjected to fearful nervous strain (not realizing the cause); others are bewildered and wistful, wondering what is the matter. Perhaps some are like little Anne who never realized that she was different from her hearing playmates in any way until she heard them say one day: "Anne, look at that pretty bird. Don't you like to



hear him sing?" And little Anne, bewildered, said: "I don't hear him singing."

We can save the hearing of thousands of children if we begin *now!* All of you agree that health is a very fundamental thing. Can we spend money to better advantage in any kind of work than in the endeavor to prevent the coming of such a handicap upon little children?

Your great organization, with its broad aims for the welfare of all children, is helping to prevent deafness. Your individual members can have an individual part in our great fight. Coöperate with local organizations for the hard of hearing. Call on members of your school boards. Urge them to have a thorough annual survey to find hard of hearing children. Work for clinics for the prevention of deafness. Help us to mold the parents, teachers, physicians and educators into a fighting unit to prevent deafness and to alleviate it.

The problem of the hard of hearing child is a challenging one. We can lessen his handicap if we will.

*Doctor Ferrell:* From the program this morning you have had opportunity to observe that there is a large number of national organizations interested in child health and child welfare. These are really only samples. There is a large number of other national organizations that are approaching the threshold of child health, each from a particular angle. It is not feasible to have on the morning program representatives of all such agencies, but we have had a fair sample and it has been interesting to note the approach that the various agencies are making in promoting child health work. I wish it had been possible to have other organizations, functioning in this field, present their programs and approaches to the problem this morning.

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TUESDAY

*Afternoon Session*

*Presiding:* MRS. HERBERT HOOVER

THE PROMOTION OF CHILD HEALTH THROUGH RECRE-  
ATION—As shown by the following:

The Girl Scouts

MISS AGNES WAYMAN, Director, Department of Physical  
Education, Barnard College, Columbia University

The Boy Scouts

L. C. DRAKE, Executive, Washington, D. C.

The Camp Fire Girls

MISS ROWE WRIGHT, Director, Department of Publications

The Y. W. C. A.

MISS JANE BELLOWS, Secretary for Health Education

The Playground and Recreation Association of America

J. W. FAUST

The National Council of the Y. M. C. A.

JOHN BROWN, JR., M. D., Secretary, Department of Physical  
Education

The Public Schools

JAY B. NASH, Director of Physical Education, New York  
University



# THE PROMOTION OF CHILD HEALTH THROUGH RECREATION

MRS. HERBERT HOOVER

The session was called to order by the presiding officer, Mrs. Herbert Hoover. Mrs. Hoover said:

"I am not only conscious of the honor that you have conferred upon me in asking me to come up here on the platform to preside over this meeting, but I have the privilege and the pleasure of listening to the speakers, and of watching the unspoken comment on all of your faces. I think the presiding officer in a meeting gets so much more than any member of the audience, because she can get the wonderful reaction the audience always shows to the speaker who is holding their attention. I see that you not only are giving me the pleasure and the honor of being here and performing that part in this meeting, but also a little bit in the way of letting me see that I am almost one of you, and if I only had a little more time, and did not have quite so many duties, that you think perhaps I could do something a little more useful in your own department, that I might enjoy the privilege of doing something a little more useful than I am able to do as it is. So I am very, very pleased to be here and listen to the very interesting speakers that you have for the afternoon. Rather, particularly as I like this field, because I think that while you can do so much for the child's health and for the child in so many ways, by way of its school and by way of its government and by way of many other compulsory organizations (not to mention the home), there is yet a tremendous lot that the child will do for himself or herself in these voluntary organizations, where he and she may be more or less on their own initiative. And whether it is health, or play, or nature study, or whatever it may be, each one feels that he or she is doing it himself or herself. So that I am particularly interested, as I know all of you here are this afternoon, in hearing what these speakers are going to say.

I see that the first name on our program is one that you do not think of, those of you who know so well, as quite in this field; Miss Wayman is so much more known in the light of Barnard College that

you think of her in that connection always rather than in connection with the Girl Scouts. But she has done a great deal for the girl graduates, and she is going to be our consulting engineer for years to come, we hope; so that I have great pleasure in introducing Miss Wayman to you this afternoon, from the Girl Scouts.

## PROMOTION OF HEALTH THROUGH THE GIRL SCOUTS

AGNES R. WAYMAN,

*Director, Department of Physical Education, Barnard College, Columbia University*

TO say that in ten minutes I could tell you what the Girl Scout organization is doing to promote health would be but to admit that we are not doing much. In these few moments at my command I can but touch the high spots.

In the first place, this is an age of speed. The modern generation is the product of a machine-made scientific age. It is pleasure-loving, pleasure-seeking. There is a desire to play uncontrolled, a desire for individual freedom, without quite knowing what real freedom is; liberty and license are being confused, we are living an automobile-movie-radio-delicatessen sort of an existence. Speed is our mainspring. A verse in a recent New York paper expressed it pretty truly when it said:

The avenues run north and south,  
The streets run east and west,  
The pedestrians run to and fro  
And then run home to rest.

Some one has said that the modern flapper works hard all day, spends half the night at a night club, and then goes home and sleeps on a "day" bed. Our youth is burning its engine out in the first 500 miles; our modern girl needs three things:

First. Intelligent, understanding leadership—leadership which is guidance with vision, the kind of leadership which leads from behind.

Second. She needs wholesome outlets for her energy, outlets which will react in a healthful way, mentally, morally and physically. Leisure time and health are closely related, for the things you do when you can

do as you please probably have greater effect upon your mental and physical health than what you do in the other twenty-four hours.

Third. She needs to be taught how to conserve her energy. There is no doubt about it, the modern girl is spending her health too fast. Instead of living on her interest she is using up her capital. The Girl Scout law, "A Girl Scout is thrifty," applies to her strength and her energy and her emotions, as well as to her nickels and her dimes, and we are trying to make her realize that and practice it.

We believe thoroughly in the newer definition of health education which states that "Health Education is the sum total of all of the influences which impinge upon a child 24 hours of the day and which affect favorably his habits, attitudes, knowledge and skills both with reference to himself personally and to the community."

We believe that in the past too much emphasis has been put upon knowledge and skills and not enough upon habits and attitudes. We are therefore putting our main emphasis upon habits and attitudes. We realize that health comes as a result of right living plus right thinking. We agree with Doctor Kilpatrick that the only way to live well is to practice living well. And we add to that, thinking well. Our ultimate goal is quality of life and living.

Because of the fact that our leaders are mostly laymen, health education is not such an easy matter. But because of the fact that the Scout way is the play way of doing things, because we teach largely through games, we have an advantage. Health teaching in the past has been too cut and dried, too uninteresting. It has dealt too much with statistics—with death-rate and sickness—not enough with life and health. Health was the condition you were in after an illness. The Scout way of teaching gives us an opportunity to vitalize the subject, to humanize it, to put music and poetry and drama into it, and to put it into them. Through health games, health trails, scrap books, banks of health, poetry and song contests, original plays, health drives and exhibits, we secure the interest and coöperation of the girl, and then using these devices and projects as pegs, we try to hang our knowledge on the pegs. And it works.

If the Department of Publication of the American Child Health Association has noticed an increase in requests for help this spring, it is partly due to the fact that the Girl Scouts in different cities are putting

on health trails or drives. Cincinnati put on a three months' drive in coöperation with other agencies there, beginning January 1, using some of the Child Health ideas in their booklet and program and some of their own. Springfield, Massachusetts, and a half dozen small towns around it have just finished a three months' drive, with hundreds of girls keeping the "Bank of Health." All over the country shorter drives are being carried on. Girls agencies in Cleveland are doing an unusual piece of work there—a year's health drive with 30,000 girls following a "health trail," each month being dedicated to a different phase of health.

It is impossible to expose so many girls to a thing of this sort without some of it taking. Posture, clothes, shoes, food, weight, physical examinations, attitudes of mind, and so forth, are all being stressed in different ways in different communities. One of the fine things about it is the nice tie-up it is causing in many communities between parents, schools, health agencies, clubs, departments in schools, girls, and so forth. Incidentally parents and teachers are being educated. Three schools in Cleveland have opened their cafeterias for breakfast because of some of the conditions the trail there is bringing out. The boys there have asked why they aren't having a similar trail.

In general, the Girl Scout organization is trying to organize and administer its whole program so that its practices in every field and department will contribute to the health of the girl and not to her detriment—to wholesome living and wholesome thinking.

It is not only stimulating and encouraging camping (44,000 girls attended Scout camps in 1926) but it is putting its emphasis upon the type of camping which supplements city life and does not duplicate it—upon simple, wholesome "campy" activities. Maybe thus we can help to bring back to our American life some of the qualities of mind and body which distinguished and characterized our early pioneer ancestors—courage, resourcefulness, honesty, loyalty, integrity, and so forth. It realizes that camping, when rightly conducted, offers a big educational opportunity; that it offers not only opportunity for wholesome recreation, but for teaching and practicing lessons in right living which will have lasting effect. Treasure hunts, paper chases, trailing, tracking and stalking games and nature games are taking the place of basketball, hockey, track and the more formalized types of play and recreation

in our camping program. Archery, swimming, sports in and on the water help to make up the program of our summer camps, in addition to camp craft and woodcraft.

How far should a growing girl hike in a day? How large a pack should she be allowed to carry, if any? Where and how should she carry it? Balanced menus for over-night hikes, how to dress, equipment, first aid—these are all questions which are closely related to the health of the growing girl and are being thrashed out by our various committees in connection with year-round programs. In all of our activities, we are placing the emphasis upon the group and group participation. We deplore the present exploitation of the girl in athletics. Where the individual is concerned, we are trying to emphasize improvement and the handicaps overcome, rather than the height to which the girl has climbed.

In all of these, I say we are trying, for as long as human nature is human, as long as the vast bulk of our leadership is lay and only partially trained, just so long will there be individual instances of mistakes and weak spots in our program and its administration.

We are trying to develop in our girls a health consciousness. We are trying to make health seem so attractive that girls will want to be healthy—that they will want to practice health habits. It requires vision and imagination. At present we are working on a complete revision of our handbook and the health requirements for the various ranks and health badges—putting more emphasis upon doing and practicing and being. In all of our programs we are trying to bring the girl into contact with situations and problems, and in the meeting of these situations and the solving of the problems she gains her knowledge and education. So it is with health. We stimulate her curiosity and in satisfying that curiosity she gets her answer.

The American Child Health Association has helped to erase from the walls of life the lurid pictures of disease which through generations have been painted there—and now we must all combine to paint a new picture there—a picture of health. The Girl Scouts are trying to help you paint that picture, the newer conception of health, not a negative one, not an absence of disease or of physical defects, not an absence of anything, but the presence of something—of exuberance, pep, energy, health-positive, radiant, a 100 per cent condition.



Said a nomadic Arabian poet, "He who has health has hope, and he who has hope has everything."

I believe that health is contagious, that it is just as contagious as disease and it travels faster. We haven't isolated the health germs as we have the disease germs, but we know that they are to be found in fresh air, sunshine, sleep, food, exercise, rest and laughter. The Girl Scouts are trying to start an epidemic of health and are spreading these health germs just as fast as they can:

1. Start young to live old.
2. Make your community safe for the healthy.
3. Every day a health day.
4. Recreation, not wreck-creation.
5. Less jay walking—more joy walking.
6. Make home a health center.
7. Not mileage but "smileage," two good feet equals one smile.
8. Follow the green line and reach the pink of perfection.
9. Health is wealth—don't be a spendthrift.

These are a few of their active slogans.

To sum up:

1. We are trying to organize and administer our whole program so it will be productive of health as a by-product.
2. We are doing definite health education in a layman's way—but with results.
3. We are health propagandists and are trying to popularize health.
4. We are preaching and teaching "conservation" to our girls.

All of this because the girl of to-day is the mother and citizen of to-morrow.

Isn't it strange that princes and kings,  
That clowns that caper in sawdust rings,  
Are common people like you and me,  
Are builders for eternity?

Each is given a bag of tools,  
A shapeless mass, and a book of rules,  
And each must make, ere life is flown,  
A stumbling block or a stepping stone.

We are trying to help our girls fashion stepping stones.

*Mrs. Hoover:* The past quarter of a century did not discover that the best leadership comes through comradeship, but I suppose we may say that we focussed and stressed it more than at any much greater period of time in the past. Perhaps the man who has done the most, I hate to say to popularize, but to spread, this spirit through the past quarter of a century, is the man who invented the game of boy scouting, and as he said very shortly afterwards, that he had hoped from the beginning that the girls would want to do it too, he had up his sleeve the game for the girls' scouting, exactly the same as for the boys.

Your committee has reversed the chronology this afternoon, and put girl scouting first on the program. The subject of the promotion of child health through the Boy Scouts is to be presented to us by Mr. Drake, who is, I think, better known to us for his information in the education and character building work. We will be particularly eager to hear what he has to say from the health side.

## CONTRIBUTION OF THE BOY SCOUT MOVEMENT TO THE PROMOTION OF CHILD HEALTH THROUGH RECREATION

LINN C. DRAKE,

*Scout Executive, District of Columbia Council, Boy Scouts of America,  
Washington, D. C.*

**S**couting places fundamental emphasis upon Health through Recreation. After its contribution to character development, as exemplified in our "Oath" and "Laws" and our "Good Turn to Someone Every Day," perhaps the greatest service the Boy Scouts of America renders to the youth of our land is in this very particular and its accomplishments in this field are distinctive and outstanding.

*Our Philosophy and Method.* In our present day living, health, like character, is largely a by-product of our pursuit after other ends. We have it, if at all, because someone has taught us wise habits, and not because it has been sought as an end in itself. Habits are fixed rather early in life and vastly more firmly if tied up with pleasurable

reactions. This is the groundwork on which Scouting has builded its great program of teaching through play.

Written into the beginnings of the movement is the sound pedagogy, "We learn by doing"; and this principle compels attention to recreational health activities. Primarily an outdoor program and utilizing basic primitive appeals to lure and hold and train our membership, the adoption of recreational methods, of games and sports and exercise for the promotion of health, is as natural as that the plant should turn toward the sun.

And these matters have been wisely guided from the first inception of the Boy Scout program. Camping and hiking and outdoor life; such knowledge of the birds and flowers and trees and stars as the boy can absorb; supervised, purposeful play; personal and public hygiene; first aid and life-saving—these form the body of a method of health instruction that has helped to carry Scouting to the ends of the earth. Let the boy track half a mile; go a mile at Scout pace; know north from south and east from west, that he may keep the trail and find his way back; build a fire with two matches; cook a meal in the open; use knife and hatchet to make his own equipment; if emergency arises, be able to signal for help; and apply first aid until an older and wiser can adequately treat an injury. Thus in imaginative re-creation of the conditions of his earlier ancestry, and in learning to meet them before he can wear among his fellows the second rank of a Scout, he has acquired a new zest for life in keeping with his instincts as a boy, and enjoyed constructive recreation of the highest order.

So by a system of advancements the Boy Scout progresses from "Tenderfoot" through "Second Class" to "First Class"; and then, by the winning of additional awards through the Merit Badge program, first to "Star Scout," then to "Life Scout," and finally to the pinnacle of every Scout's ambition, the "Eagle" rank. The trail he must travel to reach this goal is beset with obstacles from first to last, requiring physical accomplishments of no mean order.

*The Extent of Our Work.* No weakling can make the grade; but thousands of weak and under-nourished, yes, and crippled boys, are each year forming health habits and finding strength in the lure of this very trail. I spoke at Frederick one evening last week, at a Scout

Leaders' Training Course, and was surprised to find there a group of eight leaders, older boys and teachers from the Maryland School for the Deaf and Dumb, taking the course in order to better their preparation for conduct of the two Scout troops in that institution. Scouting reaches and inspires a wide variety of types of boyhood. And in reaching these it carries its message of healthful recreation to thousands of adults as well. In our own District of Columbia Council, in which the actual boy membership is less than 3,000 there are 900 volunteer adults and young men above 18 tied up in some capacity with our work—a proportion of nearly one to three—and not a one of these but gets some smattering of the value of camping and of a well-balanced health program as a result of his contacts with the Scouts. If a like proportion carries for the rest of the country, and it probably does and would be greatly increased if the parents of Scouts were added, some 215,000 men, in addition to the 646,529 boys who are now members of the Boy Scouts of America, are learning something of the gospel of health through recreational activities every year.

We are perfectly safe in saying that Scouting reaches more boys constructively for the formation of health habits than any other agency in the country, with the possible single exception of the public schools. And its program is considerably more appealing, and so more persuasive and influential than that of the schools can ever be, because it is tied in with the love of the boy for the out-of-doors, the primitive urge of the campfire's smoke, and with bestowal of awards for proficiency won, things not particularly associated with study-room or gym.

There have been 2,892,000 copies of the American "Boy Scout Hand Book" sold—a distribution probably larger than that of any other book within our time, with the exception of the Bible itself, and this volume is a textbook on health and recreation.

*Some Details of Our Health Program.* Details are burdensome, yet sometimes eloquent. The Camping records of the Boy Scouts of America are nothing less than astounding, when the transformation in boy life they have accomplished is considered. Only a few brief years ago it was the exceptional boy who got any camping experience worthy of the name. A favorite uncle might take him for a hunting trip; he would steal away to go fishing now and then; but there was no

one to guide him rightly, to instruct in nature lore, to teach him water safety, or sanitation, or to train him in outdoor games.

Reports for 1925 (those for 1926 are not yet available) show a total of 312,000 Scout week units in 3,300 summer camps, 259,702 of them in 556 expertly conducted Council Camps. This is a development so tremendous as to be difficult of visualization, and it all means added health and wholesomeness for boyhood. Details of the camping program run the whole gamut of healthful exercise and outdoor recreation. Hundreds of winter camps and camping trips not reported above, and innumerable short term troop camps would add very considerably to the total, as they do each year to the health of the Scouts participating. In connection with this camping, incomplete records show that 13,868 Scouts were taught to swim during the season of 1925.

*Content of Advancement Program.* Details of accomplishments required for Second Class honors I have previously mentioned. With these as a beginning, by further proficiency, and certain added attainments, such as proved ability to swim 50 yards, a 14-mile trip made alone or with one other Scout, on foot or by rowing, intelligible rough sketch map from field notes of a tract a mile in area, judging, a considerable nature lore, and the enlistment and training of another boy as a Tenderfoot Scout, he arrives at first class, and may begin his Merit Badge Work.

Few of you who have seen the sleeve of a Scout brilliant with a display of vari-colored medallions have paused to reflect on its significance. This much desired adornment that brightens the drab of the khaki coat is not a gift from admiring parents, and cannot be purchased with gold. Each unit is won by definite accomplishment, and so proudly worn!

Carefully safeguarded at every step, and awarded with due solemnity, these badges mark progress and real achievement in the handling of himself, and in preparation for a useful place in life. There are 76 of them, and they cover vocational and cultural subjects in the whole sweep of the alphabet from "Agriculture" to "Weather." Practically all of them involve the pursuit of hobbies, and so are recreational. With the gaining of 21, which includes 12 of the specified more significant, a Scout becomes an "Eagle"—his highest rank.

You never saw a weakling with an "Eagle" badge! If he was

house-pale and flabby when he joined, he has gained health and poise and confidence and character long before the Court of Honor pinned the Eagle emblem on his breast. I have heard many a father express the same sentiment contained in the recent words of a rather prominent citizen, who is also interested in matters of public health and hygiene: "If I were forced to make a choice, I would rather my boy should be an Eagle Scout than have a college education. In my opinion it is more significant."

Discussion of the requirements of these badges would necessitate a paper in itself. A total of 194,060 of them were granted in 1925. Such as athletics, camping, hiking, personal and public health, first aid, and physical development have to do directly with our subject. Among their requirements, merely as an illustration, are: knowledge or practice of camp sanitation, protection of water supply, the five laws of health, care of the teeth, dangers of over-specialization in athletics, proficiency in outdoor games requiring physical development, the training of other boys for a period of three months in a series of proper exercises for the development of the whole body, knowledge of communicable diseases and how they are transmitted, and so on, ad infinitum.

Lists are wearying; but I have gone through the Handbook and selected twenty others that appeal to me as pertinent to our discussion, because they involve both exercise and recreation.

Agriculture, angling, archery, bird study, botany, cooking, conservation, cycling, forestry, gardening, horsemanship, life saving, marksmanship, masonry, pioneering, seamanship, signaling, stalking, surveying and swimming.

Of these, with the seven mentioned above, nearly 100,000 were granted to Scouts in 1925.

In closing, let me repeat again that health is not the primary aim of the Boy Scout movement. "Character Development," "Citizenship Training" are our goals; but in undertaking these, by seeking to dominate with major interests and constructive suggestion the leisure hours of boyhood, we have contributed a schedule in health activities that provides one of our outstanding accomplishments when results are measured. And the end has been achieved not through preachments, but by practice.

A story oft-told is that of the Irishman, who, when asked why he dug in the ditch, replied: "That I may have money; for I must have money with which to buy food; for food is essential to give me strength; for I must have strength to dig in the ditch." There is no such monotonous round in the schedule of Scouting. We are headed toward certain definite goals; and they have to do with our country's welfare, and with the advancement of the civilization and the culture of the race. A voluminous literature presents this program; camp and hike leaders, scoutmasters and every troop official promote it; and an army of Scouts great enough to make a very considerable impress on the boy life of our country practice it.

I salute the Scout!

"His step is brisk and snappy,  
His face is bright and happy,  
The motto in his mind is: 'Be Prepared';  
He does his good turn daily,  
And he does it smiling gaily;  
And by everyone who knows him 'tis declared  
That he's manly, keen and clean;  
And it's easy to be seen  
That he's confident, and knows what he's about.  
And if this should need explaining,  
It's because he's now in training  
For the biggest things in life— for he's a Scout."

*Mrs. Hoover:* We have with us a representative from one of the other agencies engaged in this same aim that the brother and sister organizations have, of giving comradeship to the youth from those who have had experience and have learned its pleasures and its obligations.

I am quite certain, although I know nothing of Miss Wright's paper, that she is going to give us a supplement to Miss Wayman's and Mr. Drake's, and that by the end of our listening, we are going to know very much of the movement in the country for giving health to our young people. I present Miss Wright."

# HEALTH EDUCATION AS PART OF THE PROGRAM OF THE CAMP FIRE GIRLS

ROWE WRIGHT,  
*Editor-in-Chief, Publications Division, Camp Fire Girls*

A CONSCIOUSNESS of health and the importance of health is part of the fabric of the philosophy and theory as well as of the program of the Camp Fire Girls. The Law of the Camp Fire Girls lays down seven precepts as fundamentals for a joyous life for a young girl. These are: Seek Beauty, Give Service, Pursue Knowledge, Be Trustworthy, Hold on to Health, Glorify Work and Be Happy.

To learn the Law is the first thing a Camp Fire Girl does. Of course she does not spend the rest of her days meditating upon its precepts, but she does say it often in her Council Fire ceremonies, in her Camp Fire meetings, and she makes the conscientious attempt of an adolescent girl to carry it out. Therefore, Holding on to Health becomes at the very start, one of her bulwarks.

The program of activities of the Camp Fire Girls is founded on what in Camp Fire parlance is called "The Seven Crafts." There are stints or "honors" to be done and these (some eight or nine hundred in all) are classified under seven headings because the founders of the program were convinced that these seven headings were the fundamental emphases in a girl's life, that they carried over into woman's life, and that they always were and as far as finite minds can conceive, always will be the fundamental interests or urges of girls and women. These fundamental emphases are: The Home, Health, Nature Lore, Camping, Handicrafts, Business, Patriotism or Citizenship.

Fifteen years of application of these principles to activities for young girls has proved the wisdom of the educators who evolved the program, and has convinced those of us who have used the program and observed its workings, that the assumption is correct.

Health, then, permeates the Camp Fire program. Most of the activities are Health activities. Health is bound to be a by-product of the out-of-door activities, summer or winter, and of wholesome home activities. Health is a by-product of perfect social adjustment, of fitting into the environment in which one is placed—and the program



of the Camp Fire Girls, by furnishing many types of activity so that the shy or bossy or boy-crazy girl as well as every other type of girl has a chance to express herself, and by making a conscious recognition of the home and the girl's part in it, does go a long way in bringing about such an adjustment to home environment and to society.

I do not wish to make assumptions for this program or to throw out generalities or blanket statements. I, therefore, shall give an example of one way in which the Camp Fire program brought about such social adjustment. That better health followed in its train, I leave to you, who are experts on the subject, to accept or reject. I am taking your time to cite this example because we agree with Jennings that joy is an essential element in growth, and that a state of joyousness (and this cannot exist in cases of maladjustment) is the positive side of mental health or mental hygiene, and an intelligent interest or recognition of the prime elements of health, that is the nutritive elements, and the rest or relaxation elements—is easily awakened where there is sound mental health.

In a mill town of South Carolina, the Camp Fire Girls worked in the mills and lived in tumbledown shanties with their shiftless dirty parents. It was the old story of girls tired, needing relaxation when their work was done, and of having homes which were uninviting. Naturally the girls did not like to go to homes where there was nothing but wrangling and ugliness. The leader of these groups of Camp Fire Girls decided to begin at the homes. She suggested to the girls that they start a "Beautify Your Own Corner Month." When the idea took hold, the girls began seeking for a corner in their homes that they could call theirs. Sometimes it was a corner under the stairs, a corner of the porch, a bit of the attic, a strip of room big enough to hold their bed, sometimes it was a shanty in the yard. But the idea fired the imagination of these girls; they became interested in simple handicrafts, for each wanted to make a rug or curtains or something for her corner; they became interested in the virtues of soap and water and paint, in their effort to express themselves, to have a spot which was their own.

And then the families began to take interest in what the girls were doing, their fathers began nailing up the broken fences and substituting whole glass for broken panes in the windows; their mothers washed

oftener, cleaned their houses now and then, appeared less slovenly when they leaned over the mended fences to talk with their neighbors.

The manager of the mill reported to us that as long as he had been in the town, nothing had done so much to raise the standard of living in the whole town as that little "Beautify Your Own Corner Month" of the Camp Fire Girls.

The application of this incident to health is this: As soon as the girls began to be happier and more interested in their environment, it was an easy thing for that leader to introduce some ideas of personal hygiene and home hygiene.

If you look through the health honors of the Camp Fire Girls, you will see that they are interesting. Hiking, gypsy-tripping, swimming, riding, are Camp Fire health honors; so that the word health has happy associations instead of meaning only tooth brushes and baths and spinach and no tea or coffee.

Besides having health pervade all the activities, there are, of course, in the Camp Fire program, certain conscious stresses on health. The most widely used of these is the health chart. This chart is typical of all such charts. There are a number of points to be won—614 for keeping the health chart for a month of thirty days; 575 for a month of twenty-eight days; 633½ for a month of thirty-one days. If a girl makes 90 per cent she can wear the Camp Fire Health Symbol. This symbol is a beautiful combination of three Arapaho Indian symbols—the water or thunder bird above, for cleanliness, the long night symbol for sleep, the tracking symbol for exercise.

When a girl rates this symbol for twelve months in succession, she is awarded by National Headquarters a national health honor. The increase in the numbers of these symbols awarded during the last three years tells the story of the increased interest in health and the increased emphasis on health among Camp Fire Girls.

In 1924, 47 national health honors were awarded. In 1925, 57; in 1926, 181; in 1927, January to April 1st, 87. If they continue at the same rate, there will be over 300 awards in 1927.

One of the requirements for the three ranks of the Camp Fire Girls is to keep a health chart and to make a 90 per cent grade one month for the Wood Gatherer, the first rank, two months for Fire

Maker, the second rank, and three months for Torch Bearer, the highest rank.

Another definite and far reaching way of establishing an interest in health among the Camp Fire leaders and girls, is by stressing the health program in the Training Courses for leaders. In our syllabus of lessons for Training Courses, one of the fourteen lessons is devoted entirely to the health program. Ten of the other lessons include health in the development of the subject matter. From September, 1925, to June, 1926, there were 140 courses followed by 3,958 students. During the summer of 1926 there were 31 courses followed by 909 students.

Since September, 1925, in other words, 4,867 young women have gone out as leaders of Camp Fire Girls, who have had definite training in the carrying out of our Health program.

From our correspondence of other types of conscious emphasis on health which are part of the activities of the Camp Fire Girls all over the country I have made the following list:

- Presentation of health plays, original and those supplied by health organizations.

- Home Nursing courses given by American Red Cross.

- Track meets, complying with recommendations of the Girl's Branch of the National Amateur Athletic Federation.

- A hike across a canyon in Arizona, a covered wagon trip in Omaha, a Mt. McKinley trip in Alaska, a Mt. Ranier trip in Washington, a winter sports trip in Washington, a mountain climb in California and New Hampshire, the requirements for all being a record of 90 per cent health charts for the three preceding months.

- First Aid courses given by nurses and physicians.

- Classes in care of babies.

- A baby clinic established and managed by Camp Fire Girls.

- A posture campaign, a doctor examining.

- Health months, in which the keeping of the Health Chart and the attending of Red Cross courses in Home and Personal Hygiene are stressed.

- Courses in Diet and Cooking given by dieticians.

The following excerpt from a letter will give you the details of one of the other activities called a health contest. This lasted three months, the girls being awarded points for health improvement.

"The health contest was undertaken with the idea of encouraging the keeping of the health chart. The idea was this: At the beginning, girls desiring to enter the health contest were given a thorough physical exam-

ination (no laboratory test, except urinalysis). Ninety-seven girls entered. They were to keep the health chart three months and remediable defects reported to parents for correction. At the end of the three months, they were re-examined and the reports compared with the first reports. The girls making the greatest improvement, including the correction of defects were declared the winners. During the contest, the girls were given the opportunity by Dr. H. I. Gosline, Director of our Child Guidance Clinic, to take mental tests, and their rating reported. No one had access to these reports except the parents of the girls. The Otis Group Intelligence Test, Form 'B,' was used. Besides the benefit to the individual girl, our contest was of great benefit to the community, because it was largely responsible for the adoption of health service in our public schools as a member of our Council, who is also a member of the School Board, proved to that body by actual records of ninety-seven Dallas school girls, the necessity of such a service."

Let me give you a typical Camp Fire Girls health week.

Committees organized eight weeks before Health Week. Purpose, to have Health Week the beginning of a constructive Health program.

Publicity: includes coöperation of stores for window displays; posters made as handicraft projects, newspaper publicity explaining Camp Fire Health program, and so forth.

Program for Health Week. Monday. Babies' Day: Pre-school clinic held under auspices of Camp Fire Girls. Here all children under six are examined carefully by competent physician and advice given about health rules for babies, including nutrition, clothing, bathing, exercising, and sleeping.

Beforehand, Camp Fire Girls send out letters to parents naming day of clinic. Girls help by bringing babies to clinic and taking them home. Some girls stay home with other children so that mothers can take babies. Girls assist doctor and nurse with weighing and measuring of the babies and keep statistics for health survey.

Tuesday. Health Examination Day: Girls have arranged for at least one doctor and nurse to give the entire day examining. This includes posture and foot examination.

Wednesday. Better Feet Day.

Thursday. Good Posture Day.

Friday. Nutrition Day.

Saturday. Community Health Day. Program includes reports of sub-committees on street cleaning, beautifying back yards, committee on inventory of community recreation. An Evening Health survey presented by Camp Fire Girls to include statistics gathered at the health examination and health status of the babies and girls of the town.

A health play, written and staged by the girls for the occasion. Award of health week honors by mayor or well-known citizen. (Special points and health week honors have been worked out. We shall be glad to supply these upon request.)

Perhaps our greatest effort toward better health for Camp Fire Girls and their families is the Trail to Health, a book which is now in preparation. The Red Cross has generously supplied excellent chapters on First Aid, Home and Personal Hygiene, and we are proud of our chapters on posture and definite health programs. Perhaps the greatest help the book contains is the list of agencies which are working for health with definite statements prepared by each agency as to how they are willing and prepared to help Camp Fire Girls in any Health campaign or activity and with a bibliography of their publications.

In conclusion, may I say that the basis of the entire program of the Camp Fire Girls is habit building and the assumption that habits become fixed as one gets joy and satisfaction from practicing them.

The goal of this program is a joyous outlook upon life, and the program is so planned that health, the first requirement for such a joyous outlook upon life, is not only one of the foundation stones but is the mortar that holds them all together.

*Mrs. Hoover:* I think the Y.W.C.A. does not need an introduction to you, although we here in Washington feel that we like to introduce our new national building to every stranger who comes to the city. It is an extremely fine building, designed for taking the best possible care of the Y girls.

## THE HEALTH EDUCATION PROGRAM IN THE Y.W.C.A.

JANE BELLOWES,

*Director, Health Education, National Board, Young Women's Christian Associations*

THE health education program in the Young Women's Christian Association has a long range. It is planned primarily for those no longer enjoying the privileges of school: the home women, older business and industrial women, the younger business and industrial of the teen age. This latter group, taken with the teen age girl in school, constitute our Girl Reserve group. Then there are the Tiny Tots. We consider them in our program when there is no work in health or

physical education in the schools, or where we can offer something not given in school, such as dancing, swimming, games, roller skating and individual and corrective gymnastics.

We have considered health education as inclusive of physical education, because of the close tie-up between the interpretation of health through the health examination, with its follow-up work, and the understanding of the value of exercise in relation to the individual's health.

Our method of procedure is: A health examination preceding registration in any activity. The examinees range in age from two-and-a-half to seventy. The two-and-a-half to five-year group are accompanied by their mothers, for the health examination, which is given by a physician and a physical director. The physician checks and instructs on the points of elimination, recent illness or operation, eyes, ears, nose, throat, teeth, glands, skin, heart, lungs and abdomen. The physical director follows with a foot and posture examination. As a result of the child's examination, and the interest aroused in the mother, as well as knowledge gained for better health habits, the mother herself often has the examination, and enters upon some activity best suited to her needs.

Some Associations have formed a Mothers' Class which is held while the little ones are dancing or swimming. These classes have been of such nature as the psychology of play, of dancing, child psychology, and so forth. I have seen the classwork of the little tots carry out the health teachings in the way of dramatization pertaining to nutrition, play, work, posture and so forth. So much for the very young children.

I have been in Associations where the school age groups filled the Saturday morning schedule of games, dancing and swimming. Parents are invited to be present for the health examination. Not so many come as do for the baby group. These school age children do not have to be brought to the building, hence it is more difficult to succeed in having parents present. Parents are, however, notified when a real need of their presence is evident. These cases may fall into the individual or corrective classes. Several of our Associations are doing now most excellent work with crippled children. These children, in some instances, are brought in through the Rotary Clubs. Work given

them may be individual corrective gymnastics, and swimming. In the new Association building at Springfield, Ohio, they have built a small, shallow pool expressly for work with crippled children.

This pictures briefly the work with the preschool child and those of younger school-age.

The Girl Reserve, the teen age, is our next consideration. They come into the building primarily for their club work. According to the interest and ability of their leaders, some have more health emphasis than do others.

Honors and awards for the keeping of health codes has been a part of their program until this year. A Girl Reserve health record is now being kept. This covers a month's time and is signed by both the girl and her mother. It runs as follows:

*" Girl Reserve Health Record.*

I took baths at least twice this week.  
I brushed my teeth morning and night.  
I drank six glasses of water.  
I ate some green vegetables or fruit.  
I did not drink tea or coffee.  
I had nine hours' sleep at night.  
I drank a glass of milk.  
I washed my hands before meals.  
I slept with my windows open.  
I had a bowel movement.  
I took at least half an hour exercise outdoors.  
I tried to stand and sit correctly.  
I had clean finger nails.  
I brushed my hair, night and morning.  
I washed my comb and brush once a week.  
I wore 'Health' shoes."

After her health examination and six months of follow-up work or of correcting of difficulties, each Girl Reserve writes a paper on her understanding of health. I have been in an Association where Girl Reserves held their own posture clinic: a committee decided on posture and whether the girl needed to do special exercises.

Until the fall of 1926, certain health requirements held for the attainment of the Girl Reserve Ring. These are not required now, but serve as guide-posts to help attain a more abundant life.

The Girl Reserves come into the gym or pool for recreation. Formal classwork is not usual. They go to camp in their groups.

Most cities, towns and rural communities that have Association camps set aside a time when only Girl Reserves will be present. Here their yearly program is continued, but with the out-of-doors emphasis. Many Girl Reserves are Junior Red Cross Life Savers.

This year the Girl Reserves of Canton, Ohio, had a city-wide health project. They carried this on through the use of posters which they themselves made, and for which they had a contest. They had Cho-Cho, the health clown, window exhibits, health charts, health talks and plays. They coöperated with such agencies as the Metropolitan Life Insurance Company; the Red Cross, through courses in First Aid, nursing, life-saving and so forth; with the American Child Health Association, and others.

The health talks and demonstrations which they have at summer ten-day conferences, carry over; as do also the personal interviews which they have with the conference physician and physical director.

For this age group and older ones, we have health films and slides: "Foot Follies," "Individual Exercises" and "The High Road." On our list of publications we have technical material on feet and posture, nutrition, health plays, skits and posters.

The work I have mentioned thus far is for children in their various groupings. We try to dovetail our work with that of the schools, offering what they are not equipped to give. We try not to overlap. We are doing more each year in the way of coöperation with the community organizations and institutions. City-wide health weeks are reaching more groups than when the Association alone conducted the health week. Some Associations are having very direct coöperation with the local medical associations. This has led, in some instances, to the establishment of baby clinics.

Long Beach, California, had a health week, this year, instigated by the Association, in which twenty-one agencies coöperated. The proclamation by their mayor began: "At a recent meeting arranged by the Health Education Department of the Y.W.C.A., at which our physicians, hospitals, churches, schools, homes and clubs were largely represented, it was decided to arrange in our city for a week of special study and consideration of Health."

The handicap in the health work of the Association is insufficient funds for the carrying on of as complete a program as we desire to



offer. The educational part, consisting of the health examination, demonstrations, lectures and so forth, requires just double the staff formerly required for the activities program.

It is through the education of the mothers who come into our classes that the children's work may grow. It is not unusual to examine a small child or older girl who will say, in response to advice given: "Well, I wish you could get my mother to see that."

Then again, at a Girl Reserve conference last summer, a physician said to us: "Your health program is good, but it's of no use when there are so many girls with bad bodies."

### *Future Objectives:*

More stress with the mother in her ability to implant health habits.

More stress with the teacher, and more facilities granted her in the way of good posture, seating, and other equipment, for the furtherance of health.

A clearer understanding on the part of the child as to the why's and wherefore's of health teachings.

*Mrs. Hoover:* Neither the Playground and Recreation Association of America nor Mr. J. W. Faust, who is the director of the National Physical Education Service of the Association, need an introduction. But one word about Mr. Faust's work that I have heard during the day, I think throws a very interesting light on how he accomplishes as much as he does. We hear that he runs a private laboratory in carrying on the research work that makes him attain his success, and it is known as "The Back Yard," if I am not mistaken, and contains all the implements by which he works there, on six boys and girls of his own; and that he gets more success with them and with other boys and girls, by trying things on with these boys and girls in the back yard. Mr. Faust is going to tell us about the laboratory and the service.

# PROGRESS IN CHILD HEALTH AS VIEWED BY THE PLAYGROUND AND RECREA- TION ASSOCIATION OF AMERICA

J. W. FAUST,

*Playground and Recreation Association of America*

The work of the Playground and Recreation Association of America for twenty years has been directed toward a complementary phase of the health program, namely, toward increasing the recreation opportunities in towns, cities, and the country for living in leisure hours—hours not devoted to earning daily bread—a full happy devoted life.

This large order necessitates a universal play program. Every child and adult must have for the maintenance of his self-respect and the good of his soul at least one thing in which he can excel. Any recreation program must be broad enough to cover this need, and the activities appearing in the reports of 790 cities made to us last year indicate such breadth. To mention a few of them, they list athletics and athletic contests of all kinds: quoits and bowling, kite, toy-aeroplane, diabolo, hopscotch, and marble tournaments; bands, orchestras, symphonies, community sings, glees and caroling, pageants and dramatics, gardening, art and handicraft, winter sports, water sports, forums and so forth.

Here are a few examples of the work reported last year in the recreation programs of these cities which contribute to health:

A conservative average daily attendance of over a million adults and children were active on the playing fields under trained leadership last open season.

Over 48,000 teams of young men and boys played league games in baseball, football, soccer, basket ball, horseshoe, volley ball, and so forth—a total of 7,216 leagues with players enough to fill the Yale bowl about eight and a half times—632,000 plus. On bathing beaches sixty-four cities reported a total average daily attendance of 110,311 and in swimming pools 111 cities reported a total average daily attendance of 84,210.

In 1906 when the association was organized 41 playgrounds were reported. Last year the 790 cities reporting organized recreation listed 10,123 separate recreation areas. Three and three-quarters new areas

were opened every day last year. More than one new tennis court a day was opened. Municipal golf courses have grown to 194 with an average daily attendance of cities reporting of over 6,500. Over \$19,200,000 were spent for public recreation. The association works for year round recreation programs municipally supported—programs broad enough to meet the recreation needs of all ages and groups. Its contribution to the progress and growth of the recreation movement last year was made through the skilled service to cities of its field staff and through answering the more than 20,000 requests by letter and office visit for definite recreation information and advice and in many other ways.

Two other contributions more closely allied to health are its Athletic Badge Tests and National Physical Education Service.

In 1912 the association called together a committee of physical education leaders to formulate a set of measurements for physical fitness in boys, and in 1915 for girls. These tests called the Athletic Badge Tests are kept revised by a committee of leading physical education men, such men as Hammer, Atkinson, Hetherington, Adlinger, Burdick, Chase, Draper, and Hummel, with the addition of the Misses Larsen, O'Keefe, and Walter for the girls' tests. These tests are published by the United States Bureau of Education. Last year 32,000 children in 391 cities passed these physical fitness tests.

In 1918 the United States Commissioner of Education called a conference of leaders in health and education to discuss educational and legislative methods for developing more adequate physical education in the schools of the country. A committee on physical education was formed to carry out the recommendations of this conference. That November this committee requested the Playground and Recreation Association of America to establish a National Physical Education Service, "to lead in securing more adequate state and national legislation requiring physical education in schools." At that time there were eleven states with such legislation. Under the leadership of this service twenty-three states have since passed legislation. But a law alone is insufficient. In 1918 there were but two state directors of physical education. In 1926 directors are found in 20 states and 30 states with program syllabi. In addition to securing legislation the service works to strengthen and improve existing laws, to secure the establishment

of state physical education departments with adequate appropriations and to raise the standard of the work by interchange of information and experienced leadership.

These briefly then are some of the contributions of the Playground and Recreation Association of America to national child health.

The relationship of the program of the Playground and Recreation Association of America to health is best expressed in letters by the philosopher of the playground movement, Joseph Lee, two years ago. To Miss Perrin he wrote: "Of course child health is one of the great things to be sought, but I don't think it ought ever to be made primary by our association. Because for us health is not an end but a by-product. The end is play, and even that is not quite the end. The real end is the service of the play spirit. That is the way the child feels it. He is not seeking health and not seeking self-expression, not even seeking play. He is seeking something that comes to him from a spirit bigger than he is, to which he gives himself. It is like giving yourself to the river and letting it carry you. It is service to the elder gods—true persons, as I believe, of whatever gods there be—the gods of beauty and discovery and sport, for the latter of which there is no name. The attitude is one of giving your life, not of seeking it, and I think that is the attitude which on the whole brings health."

In the other letter Mr. Lee said: "It is the gray, uninteresting life that is responsible for the breakdowns, whether physical or moral, and there is comparatively little use in treating the sick in either form while the possibility of a full, happy and devoted life does not exist."

*Mrs. Hoover:* We come next to the well known Y.M.C.A., and the promotion of health through its National Council. Doctor Brown will speak to us from the angle of that organization.

# HEALTH EDUCATION IN THE Y.M.C.A.

JOHN BROWN, JR., M.D.,

*Secretary, Department of Physical Education, National Council, Y.M.C.A.*

There are a number of distinctive features which characterize the Young Men's Christian Association. As a religious organization of young men it is interdenominational in character. It is world wide in scope. It is essentially a lay movement. It seeks to exemplify the practical interpretation of Christianity. It emphasizes the unity of life. It is a work for young men by young men.

Other features might be mentioned. But the most distinctive feature of the Y.M.C.A. to my mind, is that as a religious organization for young men it has recognized and exalted the proper development and care of the physical life. Through the centuries prior to the organization of the Y.M.C.A. religious organizations discounted regard for the body. The Red Triangle, which is now recognized the world over as the emblem of the Y.M.C.A., was first suggested by the late Luther Halsey Gulick, M.D., as symbolic of the Y.M.C.A.'s conception of the unity of life and the physical, intellectual and spiritual phases of symmetrically developed boyhood and manhood.

Many other organizations have been founded on religious and educational ideals, but the Y.M.C.A. was among the first of modern religious and educational organizations to give large place in its organization, equipment, leadership, and program to health and physical education.

The future may ultimately evaluate this conception and emphasis as the chief reason for the unique contribution, rapid growth, and world-wide expansion of the Y. M. C. A.

At first thought it may seem that there is little in common in the aims and methods of the American Child Health Association and the Y.M.C.A. A very brief recital of some facts will disprove such an assumption.

While it is true that at first the Y.M.C.A. was a young men's movement, it now includes thousands of young boys and mature men in its membership while additional thousands come within the scope of its service to boys and men outside of its membership.

The Y.M.C.A. has three recognized colleges with a present enrollment of over 500 carefully selected young men who are taking the four year professional course of training for degrees in physical education. These colleges are located in Springfield, Massachusetts; Chicago, Illinois; and in Nashville, Tennessee. The graduates from these institutions are eagerly sought as directors of physical education in elementary schools, secondary schools, colleges and universities, and as playground and recreation directors, as well as by Y.M.C.A.'s. Many graduates hold important positions in physical education in other countries.

The Y.M.C.A. has eight summer schools in various sections of the United States which annually enroll another 500 students in their courses in physical education.

Approximately 1000 trained directors of physical education give their entire time as employed secretaries in the Y.M.C.A. These men enlarge their influence greatly by enlisting the coöperation of hundreds of physicians and thousands of volunteer workers, thus making possible the progressive development which has resulted in the demands for larger and more adequately equipped Y.M.C.A.'s in many cities throughout the country.

Because of the fact that every modern Y.M.C.A. has a gymnasium, running track, swimming pool, handball court, and other facilities for a varied program of physical activities, it is natural that the average citizen should regard the Y.M.C.A. as an athletic organization rather than an educational institution. More and more it is an educational project. In the first place, many Y.M.C.A.'s require medical and physical examination of all boys and men wishing to participate in physical activities. These examinations are given by competent physicians or directors. Based upon these examinations advice is given not only in regard to exercise, but also concerning health habits and hygienic living. Last year 12,703 committeemen and physicians assisted in this work.

Carefully planned series of health lectures are given, health exhibits conducted, and literature disseminated. Health clubs are organized to promote this work in many Y.M.C.A.'s.

Through our national physical education committee and staff, regional and state physical education committees, our national, regional

and state physical directors, societies, the standards of our health education are constantly being improved.

Every boy and young man who is a member of our standard gymnasiums leaders' clubs is required to take specified courses of study in health education upon which they must pass an annual examination. Last year 11,472 were members of the leaders clubs. There were 128,202 boys and men taught to swim and 29,332 were taught life saving. Instruction in classes in first aid was given to 30,000. Health education constitutes an important part of the program in the Y.M.C.A. camps which were attended last year by 75,761 members, the great majority of whom were boys. For many years the Y.M.C.A. has given special attention to instruction in sex education through the use of the most competent teachers available. Literature especially suited to particular age groups and types has been published.

Special attention is being given to education regarding the effects of the use of tobacco and alcohol by boys and men.

Each year the Y.M.C.A. promotes health education among industrial workers in the shops at noon hour and in connection with church clubs and high school groups of older boys.

Physical education, as conceived by the Y.M.C.A., seeks to put every boy and young man into full possession of his best racial inheritance and to enable him to control and adapt himself to his environment and to so understand himself that he will be in a position to order his daily life in such a manner as to attain and maintain his maximum physical efficiency as an individual, husband, father and citizen, and thus contribute positively to the betterment of the race physically, mentally, socially and morally, despite the many deteriorating influences of our modern strenuous and artificial manner of life.

We are constantly endeavoring to increase the educational content of our program. We are not satisfied when large numbers participate in our calisthenic and gymnastic classes, in our games and aquatics. Boys and men must not only take part in such activities, but they must know how and, more particularly, why they should go through them in a certain way, in order to secure desired results or to counteract undesirable tendencies. We are striving to lift boys

and men from living their physical lives according to the dictates of impulse, instinct, unregulated and harmful habits, to that of intelligent and reasoned control of the physical life, not as an end in itself, but as a primary requisite to a complete and balanced manhood.

This means that we give more attention to the development of organic vigor than to the training of expert performers, to the mass rather than the few, to the needy rather than the fit, to the informal and hygienic rather than the formal, highly specialized and extremely competitive types of program.

The Y.M.C.A. recognizes that where there is poor health the people perish, and in the land that is not characterized by a play spirit and wholesome recreation, intellectual and moral decadence is sure to come.

The work of the American Child Health Association and that of the Young Men's Christian Association is closely related.

Our boys come from the same homes where are the younger children whom you serve. Let us hope that we shall help to make real mothers' helpers who by example and precept will be a real factor in caring for the little ones. In this connection it is important to remember that small children learn from older children more readily than from adults.

The young men whom we serve are among the flower of the manhood of the nation. We believe we are contributing in no small measure to preparing them to be better husbands and fathers.

By helping to keep thousands of business and industrial workers physically fit and intellectually efficient, the Y.M.C.A. is helping to provide the best health insurance for the entire family.

The noblest thing in the world is a man,  
The saddest sight in the world is the wreck of a man,  
The grandest work in the world is the making of a man,  
The Y.M.C.A. is in the business of making men.

*Mrs. Hoover:* Mr. Nash will take the floor now.



# PROMOTION OF CHILD HEALTH THROUGH RECREATION IN THE PUBLIC SCHOOLS

JAY B. NASH,

*Professor, Physical Education, School of Education, New York University*

THERE are three great "Whats" in all education. These particularly apply to health education.

What does the child know? We know pretty well what the child knows. We can find out by giving him tests if we want to. He can memorize health rules. He can make out health charts. We can give him an examination and find out to what per cent he is efficient; but after all, that "What" is really not the important "What."

What can he do?

To-day, in education, we can determine that "What" with a great deal of efficiency. We know what the boy can do in health education and general education. We know what he can do in the laboratory, what he can do on the athletic field, what he can do in the manual training shop, what he can do in his clubs. We can give him objective tests and find out what he can do.

But there is another "What." What will he do?

Ah, that is a different "What"! That is the "What" that is on the lips of every mother and father when the boy leaves home. That is the "What" that is on the lips of every scout master, that is on the lips of every school teacher when the boy leaves the school room. "What will he do?" depends upon what he really wants to do.

I am going to talk to you to-day from the standpoint of the schools; what the school is doing and can do in regard to teaching the child to "want" health. Schools to-day have changed. Men are there trying to work out processes and ways of attaining ends. If I cannot give you some hint of the learning process from the standpoint of the School of Education, then I have wasted your time and my own.

What he will do, depends upon what he wants to do; and that

"want" is one of the greatest words in the language. What does a boy or a girl want to do, and how can we make him want to follow health rules experience has shown best for him to follow? That is the task of the school.

It seems to me, Madam Chairman, that there is no field to-day in which we more greatly need a clarification of terminology. There is no field to-day in which, as in health education, you and I think we are talking on the same subject, but when we come together we just shoot right past each other as trains on parallel tracks.

I am going to suggest three phases of health education and try to define and illustrate them, all of which are partially in the province of the educator. Education is here used in a much broader sense than the word "schooling." Everything you have heard this afternoon from all the club groups is education.

The school is making its contribution in three distinct phases of health activities.

#### HEALTH PROTECTION

This is the adult program for the care and the protection of the children of the community. More and more the school is realizing that it must face its responsibility in this connection.

Health conditions are being controlled especially as they relate to contagious diseases, physical defects and to school room conditions such as ventilation, lighting, heating, cleanliness, and so forth.

These school procedures are having a very distinct influence on the condition in connection with the home and the community.

In this control of health conditions the school is proceeding along the following lines:

##### *Periodic Examination.*

In the lower grades where this can not be carried on each year the examination is often given in the first, fifth and eighth years of school attendance. This also assumes an examination for all new students in the school who come from transfer. This examination is best conducted by a team consisting of a doctor, nurse and a physical director.

*Daily Inspection.*

This daily inspection must of necessity be carried on by the room teacher by and with the advice and help of a nurse. Signs and symptoms of contagious diseases may here be detected and the child excluded from the school or in doubtful cases referred to the school nurse.

*Follow-up Procedure.*

This is suggested in the light of the local conditions.

*Remedies Within the School.*

Conditions that are remedial are conducted within the school. This means the serving of hot lunches, the establishing of nutrition classes, the establishing of rest hours, and so forth.

*Clinical Service.*

Where the home is not in a position to take care of the remedial follow-up suggested, the school operates through public clinics or clinics established within the school system.

#### BUILDING CAPACITY FOR HEALTH

The second contribution of the school in the health field is in the building capacity for health. What do we mean by "capacity"? We mean ability to resist strain, to resist fatigue, ability to sustain effort for a long time under trying circumstances, and the ability to come back to normal after strenuous activity.

The only way to acquire this capacity, unless it is inherited, is by means of physical activity, adjusted to individual needs.

A thing that we must not forget is that the great mass of the men who are now sitting in swivel chairs and governing the great institutions of our cities, were raised on the farm. There they gained great organic capacity through long hours, certainly twelve to fourteen hours every day, in big muscle activity in the open air. They here laid the foundation, the capacity for health. Jennings tells us this. If you do not know the little book, "Suggestions of Modern Science Concerning Education," you ought to get it and read it care-

fully. There is not a word in it that is not of the most vital importance to education, to science, and it is the most common sense chapter that was ever written about health.

What has the school to do with building capacity? That is one of the prime contributions of the department of physical education of the school. I do not believe that physical education and health education are wholly synonymous. They overlap and in many instances will be administered by one department. Health education must be the objective of all departments of the school; every dollar spent should be aimed at health. There must, however, be an organizing center which assumes the responsibility of health activities. That phase of the school activity will of necessity be administrative and should be so recognized. It is necessary that this be administrative in order that every department of the school realize its importance in the health program. Building capacity for health, from the standpoint of the school, centers entirely in the department of physical education—not the old type of physical education that lines children up in the classroom and says “do this for twenty minutes each day and you will have health.” These children need, not twenty minutes a day of “exercise” in that way, but from four to six hours a day of vigorous self-impelled activity. Did you ever see children lining up on the sand lots doing this (indicating calisthenics) for enjoyment? Did you ever see it? I never have. I am waiting for the day when I do see it. That type of “exercise” is not physical education.

Physical education involves the building of capacity, physical capacity, and the drive that gives children that capacity is the drive of play. May I stop just one moment to say that “play” to-day is the most misunderstood word in the English language. People are using “play” many times as a synonym of “amusement.” It is a common thing to hear it said, “You must stop you childish play now, and settle down to the serious business of life.” You hear it on all sides. They say “It is a waste of time. You must settle down now to the serious things of life.” What is it that brings a small boy up to bat in a game of baseball? What is it that drives him to hit at that ball, and if he hits it, to run around the bases just as fast as he possibly can, until he drops, almost exhausted, at the home plate? If you will answer that you will be famous. What

is it? I do not know; but I know it is there. You may remember the story of Johnnie who came home and told his mother, "I am the smartest boy in school, mother." "Oh, Johnnie; I am so glad. How do you know it? Did you have an examination in the class?" "Nope." "Did the principal tell you?" "Nope." "Well, Johnnie, how do you know?" He said, "Mother, I just know it." Now, there are a few things in life that we can just know, and that no swivel chair psychologist, no spectacled professor, can bombard us out of our position on. What is it that brings that boy "to bat"? There is no regulation on it. He has not been required to do that seven times a day before he can come home to dinner. There has been no city ordinance on it. But you say, just recurring to my conclusion, "That is a waste of time. It is foolishness and idleness. But he will grow up some time and settle down to the serious things of life." May I ask another question. What is it that takes father at four o'clock in the morning out onto an open pasture field with a big, long stick and a little white ball where he spends four hours propelling that ball from one spot to another?

I never knew a boy who spent the same amount of energy chopping kindling wood as he did playing baseball; and I never knew a father who got up at four o'clock in the morning and waited for it to get light enough so that he could see to spade up the garden. It is that activity drive that builds physical capacity. We need that play drive in the early years to lay a sound organic capacity. From then on we need a certain amount of it to keep ourselves up to par.

This play is needed to build capacity and at the same time to offset the strains that seem to be associated with school life, they would not be associated with the right type of school life. Jennings says:

"The young child perhaps learns more and develops better through its play than through any other form of activity. Opportunity for varied play under healthful outward conditions is beyond doubt the chief need of children; comparative study of the mental and physical development of children to whom full opportunity for such play is given shows striking superiority, as compared with children to whom such opportunities are denied."—*Suggestions of Modern Science Concerning Education*, page 46.

Physical examinations are needed to determine the child's fitness for physical activity but once that fitness is determined the capacity is built through activity.

## HEALTH TEACHING

The next contribution of the school in the health program is a teaching process. All of the laws of learning are involved, chief among which is the law of satisfaction. When we get satisfaction from an activity we want to repeat it; if not we do not want to repeat it. Applied to health education this means that the following of the health rules must bring satisfaction. Now as a rule the reverse is the situation. Not eating candy is a sacrifice. Going to bed early is a sacrifice. What can we offer the child as satisfaction that will offset these non-satisfactions and make him want to follow health rules. This is the heart of the health education problem. We can offer the boy three things which bring satisfaction if he follows the health rules.

*First, is the fear of pain.*

I will venture to say that there is not a single one of the people in this room that ever has carried out a health rule because of fear of pain. Once in a while we do. Boys do not. The boy says, "I have never been happy the day after Thanksgiving, if I have eaten too much I am sick, and if I have not eaten too much I am sorry I didn't eat a little more." A boy never stops because his mother says, "To-morrow you will have a stomach ache." He says, "Ma, I will take a chance." Most of us do.

*Second, is the emotion that comes from feeling fine.*

That is too philosophical for a boy, or for you.

*Third, getting what he wants.*

The third incentive towards health as an objective is in order to be able to accomplish some result that the individual wants to accomplish. Let me illustrate what I mean. Here is a group of boys. I have them in my room, say in the eighth grade. I am going to say, "Boys, here are the rules. Your reward for keeping them is that you are going to live five years longer after you are eighty"; or you are not going to have pain, or something of that sort. I am not going to get a twinkle out of them. If I say, "You are going to feel fine between thirty and forty," or "next week," it is the same;

not a sign. But if I say to those boys, "We are going to have a baseball team out of this bunch, and we are going to give you a test in the next eight weeks. These are the rules that will make you better players. If you want to get on this team, keep the rules." That is different. The boys see some connection between the rules and the things they want to do.

Every boy wants to run faster, jump farther, and higher, pitch better and play quarterback better. In his life, he wants to do those things more than anything else. Therefore, we come back to health teaching and say, "Health is a standard of behavior. If you want to play on my team here are the rules."

With the modern college boys, the football coach will shake his fist under their noses and say, "You be in at nine o'clock; you get nine hours' sleep; you eat three regular meals a day and exactly what I tell you to eat, or off the team you go," and the boy says, "Yes, sir." Will this college man so answer if you say to him, "Do this, or you cannot get into my English composition class"? He will say, "Go hang, with your English composition class." Therefore we are going to place standards on things children want to do. You cannot build standards on things that the child does not want to do. I am going to give you one example that is more or less nation-wide and well known.

Some years ago, early in the fall of the year, a little unheard of college in Kentucky received a letter from one of the "late" Big Three. The letter was turned over to the captain of the football team and he read it to his men. It was received with great merriment. The very idea that anyone could expect little Center to play football against the mighty Harvard. After sleeping over the matter that night, it occurred to someone to remind the team that no matter what the size of the respective colleges, only eleven men could play on the football team at one time. It occurred to someone else to ask if eleven men from the hills of Kentucky were not just as good as eleven men raised in any part of the globe. It is reported that the captain said to his men, "I am willing to lead this team out into the Harvard Stadium if you men are willing to train for the event." They agreed. They found out the training rules of Harvard, the hours the team slept, the time of meals and the menu (especially in

regard to fruit and vegetables), the rules in regard to tobacco, and so forth. These men from the hills of Kentucky took these rules and took them seriously. For months they trained and they practiced, unknown and unheralded. One day, this little team trotted onto the football field in Cambridge. The small crowd had come to see a practice game—a warmer-up for the games later in the season. To the astonishment of the spectators that little band of men knelt in the center of the field and prayed that they might acquit themselves like men.

The result is history. It was one of the hardest fought football games every played. That little band of Kentucky fighters under the leadership of Bob McWilliam humbled the Harvard team and returned the next year to completely shut them out on a six to nothing score. What was the requirement demanded of these men who were able to conquer the Harvard football team? It was that each one be *physically strong*, able to do a *man's work* and to *perform hard tasks*. They trained because they wanted to perform that task.

The establishment of proper "wants" in the minds of the rising generation is the task of education. This education involves not only the school but the home and all of the cross sections of the community such as we have heard from this afternoon. Some boys have more handicaps than others. Those boys will have to train harder. The story of a boy who overcame practically every handicap possible should be of encouragement to the boy with a handicap.

The "want" must be made very personal. This "want" is well illustrated in the closing illustration that I will give you.

On October 27, 1858, a boy was born at 28 East Twentieth Street, New York City, who developed in the first few years of his life about as many handicaps as any boy could possibly have. He says:

"I was a sickly, delicate boy, suffering from asthma and frequently had to be sent on trips to find a place where I could breathe. One of my memories is of my father walking up and down the room with me in his arms at night when I was a very small person, and of sitting up in bed gasping, with my father and mother trying to help me."

He was very nearsighted and says that the only things that he could see were those he "ran against or stumbled over." When this boy



was about the age of the older boys in our Elementary Schools, he found himself with no natural bodily strength and unable to hold his own when thrown in contact with other boys. He was nervous, timid and in no way their equal. One summer he was sent by his parents on a camping trip to Moosehead Lake. He says:

"On the stage-coach ride thither I encountered a couple of other boys who were about my own age, but very much more competent and also much more mischievous. I have no doubt they were good-hearted boys, but they were boys! The worst feature was that when I finally tried to fight them I discovered that either one singly could not only handle me with easy contempt—but handle me so as not to hurt me much, and yet to prevent my doing any damage whatever in return."

He found that when he would run with other boys he would always be beaten; when he would wrestle with them, he would always be thrown; when he would swim with them, he would always be left behind; in other words, he was no match for other boys, even those younger and smaller than himself. Yet in his heart there burned the admiration for strong men, ranging from the soldiers at Valley Forge to the heroes of the Civil War. He determined that he would make of himself a man able to do a *man's work*.

To-day that man stands the world over, as an example of indomitable strength and courage, a personification of unconquerable America. That man was Theodore Roosevelt.

*Doctor Wood:* I wish to express my appreciation, as an officer in this Association, for this splendid program, representing so many organizations and giving us, in this nicely prepared series, the contributions of these organizations to the health and welfare of childhood.

We are grateful to Mrs. Hoover for her coöperation this afternoon.

As a worker of many years in this general field I wish to say that this program represents, as a symposium, the very significant program of services supplementing the work of the schools of this country for the boys and girls of school age; and I should like to say further, from the standpoint of a person connected in part with the schools, that there is not a single constructive activity, idea, project, which has been reported, recommended this afternoon, which the schools should not include in their own program of education for

children and youth. Nor does that mean that the schools can ever do all that these voluntary, socially motivated organizations can do. I am impressed more to-day than ever before with the opportunity and the importance of two things; first, an increasingly better coördination of the work of these organizations interested in childhood and youth with our public schools, through an understanding and a sympathetic recognition by each institution of the value of the work done by the other, better organization of effort; and second, the increasing importance of unselfish coöperation between the various organizations represented in the program to-day.

The program this afternoon has illustrated and exemplified, to me, clearly and dramatically, the very important idea presented by Mrs. Gruenberg this morning, as to the great importance of having those who are interested in and working for the health and welfare of children and youth, understand fully the nature and needs of the child. This means the recognition of the wholeness of the child; that the child in the work done for him and for her, shall be helped by synthesis and unification, through bringing together these efforts in his behalf and her behalf; that while it is important to organizations to departmentalize, to specialize, in their efforts, we need increasingly to help the child to find himself as a whole, united creature, in an increasingly complex world, with its tremendously complex environment.

Madam Chairman, I feel that we have been distinctly carried forward a step in the understanding and appreciation of the various significant and greatly important efforts which this program represents.



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TUESDAY

*Evening Session*

*Presiding:* DOCTOR WOOD

Importance of Bringing the Child to School in Good Health and of  
Keeping Him in Good Health During School Life

BORDEN S. VEEDER, M.D., Professor of Clinical Pediatrics, School  
of Medicine, Washington University, St. Louis, Missouri

San Francisco's School Health Program—Result of Six Years' Study

HAROLD K. FABER, M.D., Professor of Medicine (Pediatrics),  
School of Medicine, Stanford University, California

Fitting the Child's Education to His Mental and Physical Abilities

ELEANOR C. KEMP, Ph.D., Director, Psychological Center, New  
York League for Mental Hygiene of Children

Child Health Protection or Neglect: Ultimate Cost to the Community

LOUIS I. DUBLIN, Ph.D., Statistician, Metropolitan Life Insur-  
ance Company



# THE SCHOOL AND CHILD HEALTH

THOMAS D. WOOD, M.D.

In opening meeting Doctor Wood, the presiding officer, said :

The subject to-night is, "The School and Child Health." The school in the United States, as you all well know, is the official and universal agency of society for this great function of public education. Our foremost educators, in the more recent and authoritative statements of educational principles and objectives, are quite seriously placing health as the first and fundamental objective of education.

It is, I believe, a reasonable function and responsibility of the school to set up the general standards for attainment in education in health as well as in mental and vocational forms of outcomes and accomplishments.

It is necessary that those who are responsible for the school programs, for the curricula, should have the advice of many different types of professional experts in determining their own principles and programs for the schools.

However, after such expert advice has been given, it is the privilege and responsibility of the school to carry out the program of education, including the provision for the health promotion and health education of the child.

We have to-night a program dealing with the school and child health, in which every speaker represents a professional experience, a professional position, outside of the school. It is quite in accord with the purpose and function of the American Child Health Association, as I understand them, that in these conferences and meetings, the programs should bring together the voluntary agencies and organizations that are interested in these fundamental problems of health and education. It is of great value to us, those who are working within the schools as well as those who are working outside of the schools, to have the benefit of the standards that are proposed and supported in this way.

Our program to-night, then, starts with the topic, the importance of bringing the child to school in good health and of keeping him in good health during school life, and we are fortunate in having this address presented by Doctor Veeder, whom I am very glad to introduce.

# IMPORTANCE OF BRINGING THE CHILD TO SCHOOL IN GOOD HEALTH AND KEEPING HIM IN GOOD HEALTH DURING SCHOOL LIFE

BORDEN S. VEEDER, M.D.,

*Professor of Clinical Pediatrics, Washington University School of Medicine, St. Louis*

**I**N the title of the subject upon which I have been asked to speak this evening there is a certain implication which merits discussion. It may well be asked why "school" should be an objective or a reason for maintaining the health of the child. The "school" is but one of the environmental factors which influence the development of the child and certainly school cannot be regarded as a goal or an object or an aim in life. That the importance of health to the developing child has its basis in a much bigger and broader ground than "school" no one would think of questioning. Nevertheless "school" plays such a dominating and important role in the life of the child that it has an importance in the problem of individual health.

The older philosophy said that school is a preparation for life—the newer, that it is life itself. It is with the latter conception that I agree. We must get away from the theory that school is simply a place to learn the three "R's" and their multiplication or magnification in one direction or another. If we consider the life of the child as a part of the development of the individual as a whole, it has a much more important role. For the first few years of a child's life his environment is closely limited to his immediate family group. His habits, his thoughts, his reactions, and his health are influenced and governed by a very small limited group of people. His development depends largely upon the character and personality of a very few individuals. The induction into school life marks the first definite change in his environment. For the first time the child must adapt himself to an environment in which he meets authority, restriction and limitations imposed from outside his immediate family group. It is the beginning of a social adjustment to hostile forces which continues throughout the rest of his lifetime. While at first these are accepted passively and the average child fits in

without difficulty there comes a second stage of school life in which the adjustment is not so easy. This is the period of pubescence and early adolescence which is characterized by the conflict between the urge for individuality and independence, which comes from within, and the more or less rigid environment of the outside world with its customs, taboos, social and economic barriers and the like, which says to him: "Conform." All or most of this takes place during what we call the school age. So we see that "school" is one of the most important periods in the life of the child and in the development of the individual. To meet this life and the changes in development and adjustment which are taking place the child needs every help and resource possible, and among the most important of these is health. To ask or expect of a child that he shall make these new adjustments is to ask a great deal. To ask it of a child in poor health, from malnutrition or some definite physical disease or defect, is to ask too much, as experience has all too frequently shown.

Experience has shown that it is dangerous as a rule for a child to enter the period of formal education until the age of six or seven years. Until this time the young, growing, developing organism is best allowed to run free without formal tasks. Modern educational movements have introduced a modified form of education at an earlier period and it has been found that with changing living conditions, particularly in urban life, an entrance into the school group at an earlier age is not injurious. Thus the kindergarten has made an accepted place for itself. The nursery school movement extending group activities into a still earlier age is so negligible a factor that it can be ignored. Although recognized officially in Great Britain by the Fisher Act, passed a few years ago, there were but eighteen (18) such schools in England last year and in the United States still fewer. For the vast majority of children we can thus consider the school age as beginning at approximately the sixth year. It is recognized that any form of educational activity before the sixth year must be very limited in time and that physical development is of greater importance than formal mental training during these early years.

Let us consider the physical condition of children as we find them at the sixth year, or the time when school life begins for the vast majority. Numerous surveys have been made in all parts of the world



and in many cities and rural districts in the United States. Statistics vary somewhat according to the training and opinion of the personnel making the survey, as well as the material investigated, but taken as a whole there is a surprising agreement in regard to the findings. Among the most important findings are malnutrition, 30 per cent, carious teeth, 60 per cent, obstructed nasal breathing, 25 per cent. Of course these vary in degree and it is the degree of the defect which makes it of little or great importance to the welfare and health of the individual. But these statistics are enough to show that a large percentage of children enter school life with a decided and definite handicap. It is quite pertinent to ask how we can expect a handicapped child to obtain the best from the new life which he enters at this time. As the child grows older we find a gradual decrease in the percentage of handicaps as a rule, but that new and important forms play an increasing role. Thus the extent of cardiac disease and of defective vision increases year by year as the school age advances. It has been estimated as the result of numerous surveys that 75 per cent of the children in school have one or more physical defects. Certainly not more than a third of these, however, have conditions which to any appreciable extent affect the general health and progress of the child.

Despite the many general studies which have been made of the health of school children, there are very few direct or specific studies showing the effect of poor health upon either the school career or progress in school of such children compared with physically fit children. We have accepted the general principle that children with defect or disease will not make the progress in school that will be made by normal children and practically all school medical work has accepted this premise. As a matter of fact I see no reason why we should not accept it. It is a conclusion, I am sure, that has been reached by every physician in the material in his own practice. One of the first considerations of the pediatricist in discussing the question of the individual child entering school is the physical condition of the child. We know, for example, that for the average child the induction into school life means the almost certain exposure to the infectious diseases of childhood. The child whose health is below par is no more susceptible to these infections than the child in the best physical condition—contrary to the usual layman's viewpoint—but the child physically fit will come

through them as a rule without difficulty and is not apt to develop complications which prolong the injury of the disease. The greatest damage, however, does not come from the specific group of communicable disease but from the group of rather nondescript upper respiratory infections which are the chief cause of trouble among school children and the major cause of absence from sickness. There is no doubt but that the child with impaired health, and particularly the group in which obstructed nasal breathing is present, are not only more susceptible to such diseases, but that the "colds" to which exposure in school is so common have much more serious results on progress and development. The moment a child enters school the frequency of contact infection increases tremendously. The better the health and physical condition of the child the less serious these will be and the less mark they will leave upon the normal development of the child. The physician who practices among children keeps considerations of this character in mind when considering the question of school for the individual child.

One of the first thoughts that come to mind when one considers the relation between health and the school is the question of the effect of ill health upon progress in school and the question of retardation. It is most surprising to find how little definite information we have regarding this point which is of seemingly fundamental importance. For example there is little information available in school reports or bulletins of educational institutions regarding retardation or the amount of repetition. The nearest figures that be reached is to calculate from age classification of pupils by grades the number who are two or more years over the average age of the grade and consider them as retarded. Such figures are obviously open to all sorts of errors in any attempt to calculate from them the amount of repetition as a whole. The nearest conclusion that can be reached is that somewhere around ten per cent of the children in our elementary schools (and this figure is probably low), are definitely retarded and have had to repeat one or more years. To what extent this retardation is due to physical reasons is difficult to say. Various estimates of from ten to forty per cent have been made. Such variation is due in large part to the type of the material investigated or studied. Every physician can recall striking cases where retardation has been due to illness or to

physical causes, or of examples where apparent mental backwardness was not due to mental defect, but in reality the result of some correctible physical handicap. But the figures for the amount of retardation as a whole due to physical causes and ill health cannot be calculated. That it plays an important role I do not think can be doubted. But as in so many health problems, as in the reduction of infant mortality as an example, the causes are so complex and so interwoven that it is practically impossible to take one single individual item and evaluate its exact role or part. However, striking examples are common of the change in progress and mental activity of children after obstructed nasal breathing has been cleared up or after visual defects have been corrected. These two lesions are the most important specific physical handicaps which directly affect progress in school. Long continued malnutrition has been found definitely to retard progress but we can scarcely regard malnutrition except as an indication of physical unfitness which may be the results of quite complex causes. If we could calculate the figures I am sure that we could obtain some interesting data from an economic standpoint, and would find that through preventive health measures there could be a marked saving in the two billions of dollars which is the approximate sum spent last year in the United States for elementary and high school education, to say nothing of the amount expended for private and denominational schools.

There is another relationship between the health of the school child and his development and progress in school which is more subtle but which nevertheless brings at times an important practical problem which causes difficulties. The child who for physical reasons is unable to enter into the usual play and activities of his schoolmates not infrequently develops traits or tendencies which are detrimental in the development of what we may call his personality. Thus, for example, the cardiac and the crippled child very frequently become morose and egocentric and are set aside as "queer" by their mates. To a lesser degree the delicate child who has to be carefully watched shows the same tendencies to deviations from the norm. While these are definite and marked where the physical handicap is severe, there is no question but that the minor degrees of physical unfitness have an important role in determining the manner in which the child makes his social adjustments and fits in with his group. Where we find a child

who fails to fit in, whether the cause be due to retardation, physical limitations, or even exceptional ability, we find an unhappy child.

No matter how we approach the subject we arrive at a conclusion that it is quite difficult if not impossible to point out or prove in a specific statistical manner the importance of health to the school child. Nevertheless there is no question in our minds but that it is important. To a large extent, the importance of health in this connection rests upon our conception of what is meant by the term school. Perhaps the best way to reach an answer is to ask why school itself is important to the child. The obvious answer to this is that its purpose is to educate the child. Then in turn comes the question of the importance of education. This is not so easy to answer as it seems. When we reach a final analysis we can come to but one reason or conclusion. The purpose of education as represented by the school is to develop the young growing organism that it has the best possible opportunity of surviving in the complex structure of the social organization of to-day. In other words it is nothing more than a mechanism which we use to help the individual to exist and survive in the struggle for existence which is one of the two fundamental laws of biological life. Not only must the individual be prepared mentally, which is the specific task of school education, but he must be developed physically as well. In the centuries long past physical fitness was much more essential than mental development. In the structure of to-day's civilization the place of mental development is of much greater importance than in the past. Perhaps we have overemphasized mental development in the past century and to-day with our awakened interest in the health of the child we are swinging back to a much more rational ground. The two go hand in hand. It is wrong to consider one as more important than the other, or that one is an adjunct to the other, or that either is an end or a goal in itself. The child of school age is going through a period of development in which it must make an adjustment with the complex environment which surrounds it. It is very similar to the adjustment which continues throughout life. In this sense it is life itself that the child is living, and not simply a phase of development. The chief difference is that the child during this period is protected and guided and not until adolescence do we find independence. Sound health is as important as a sound mind in this adaptation. We cannot expect the

child in poor health to make this adjustment, which takes place during the school years, with the same degree of success as the child who is physically fit, nor can we hope to have him fit into the complex structure of life at this time, in which school is such a dominating factor, with the same degree of smoothness as the child who enters it without handicap. If we look upon life as a whole, school becomes but one of the environmental factors and the importance of bringing a child to school in good health and keeping him in good health during school life rests on the same grounds as the importance of his going to school at all.

I fear I have wandered somewhat from the specific theme which the program committee expected me to discuss from the title assigned. But to paraphrase an old remark, "What is a title between friends?" It has often seemed to me as I have discussed schools and education with my pedagogical friends, and child health with my child hygiene friends, that we too often considered the means and mechanisms as an end and not looked upon them in their proper function. What we are interested in is the life of the child. Both the physical and mental development go hand in hand and neither is of secondary importance. This I think is the conception we are reaching in our child hygiene work and the more the pedagogue becomes interested in health, and the physician becomes conversant with education, the nearer we shall both come to helping the child to live his life during his school years in a manner which will bring about his best development.

*Dr. Wood:* That statement is a very significant peroration for a very valuable paper.

The next paper is a report of San Francisco's school health program, and should be announced as the results of six years' study. This will be presented by Doctor Faber.

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# A SURVEY OF THE HEALTH PROGRAM IN THE SAN FRANCISCO SCHOOLS FROM 1921 TO 1927

HAROLD K. FABER, M.D.

*Professor of Pediatrics, Stanford University Medical School*

THE present San Francisco school health program dates back to the spring of 1921 when a survey was made by the San Francisco Tuberculosis Association of the 44,500 children in the grammar grades of the 93 public schools. The survey consisted of measuring height and weight, and of so much of a physical examination as could be accomplished under the state law forbidding the removal of clothing. The data showed that about 9,400 or 21 per cent of the children were 7 per cent or more underweight by the Wood tables; that about 18,000, or 40 per cent, showed faulty posture; about 39,000, or 87 per cent, showed dental defects; about 15,000, or 33 per cent, diseased tonsils; about 11,000, enlarged adenoids; about 4,500 appeared anemic; and nearly 16,000, or 35 per cent, showed enlargement of the cervical glands. The 7 per cent underweight group showed significantly larger incidences of faulty posture, anemia and glandular enlargements and approximately the same incidences of the other defects noted.

This study gave the initial impetus to a vigorous and fairly well-concerted campaign to improve the health of our school children. With the exception of the bread-and-milk lunches, the campaign was begun and supported for a limited time by the Tuberculosis Association, with the definite objective which has now been attained, of transferring to the city authorities, the Board of Health and the Board of Education, each department of the work as soon as it had passed the earlier developmental stages.

The Association from the start acted on the principle of encouraging and utilizing, against malnutrition and other physical handicaps, all such methods as then seemed promising of success, rather than to employ only one. Accordingly in the autumn of 1921, nutrition classes on the Emerson plan; health education on the lines developed by the Child Health Organization; the serving of supplementary midmorning

lunches of bread and milk; and regular weighing and measuring of all children were started. The development and results of the various phases of the work will be separately discussed, but I may add, at this point, that the simultaneous development of different phases has had this very important advantage, it has enabled the Board of Health and the Board of Education each eventually to work out its independent and coördinate part in the general program, without much overlapping, with little friction, and with excellent team work in the common cause.

The Association not only subsidized the work in its developmental stages but has up to the present periodically collected and analyzed such data, including heights and weights, as might be expected to show something of the progress of the work and the objective results being obtained. In this endeavor it has been assisted by the Boards of Health and of Education.

### *The Nutrition and Health Supervision Classes*

Nutrition classes were started in two schools in the fall of 1921 and in ten more schools during that school year. These classes, conducted by a worker who had taken some special training, were of the type advocated by W. R. P. Emerson, M.D. They were small, rarely with more than twenty children. The class work was intended to cover not only class instruction but to give attention to the individual problems of the child. Strong efforts were made, without complete success it is true, to have each child physically examined in a really thorough manner either by a private physician or at one of the children's clinics. Mothers were urged to attend the classes. At this period it was difficult, because of the small number of school nurses, to have special home visits, with the result that the coöperation of parents and an understanding of the problems of the individual household could not be adequately obtained. At the beginning of the fall term of 1922, 329 children were enrolled in classes in twelve schools. By March, 1923, there were classes in twenty-six schools with an enrollment of 886. At this time formal classes were discontinued and the individual consultation plan substituted. The children were weighed once in two weeks. By the end of the school year, 1232 children were enrolled. In August, 1923, class instruction was resumed,

supplementing but not supplanting individual consultation. At about this time the volume of work was greatly enlarged by putting the major part of the work in the hands of the school teachers themselves who were given a small subsidy for this task by the Tuberculosis Association. There were 2,403 children under supervision during 1923-24 in 41 classes, of which 36 were conducted by teachers and five by full-time nutrition workers. The latter were employed mainly in supervising and assisting the former. In 1924, the Board of Health was at last able to increase its nursing staff and to begin to take over as its own the health supervision classes. In 1925, the work was wholly in their hands, where it has continued up to the present. There is obviously much, perhaps I should say everything, to recommend this policy. The malnourished child is after all a sick child and presents a problem as regards his individual treatment to be attacked primarily, from the medical angle, by a study of his own pathology and faulty environment followed by such medical or hygienic management as is appropriate to his case. The nurse is not only in a better position to appreciate the medical needs of the individual child and to bring them to the attention of the physician but also to gain the essential knowledge through home visits of individual household problems. We frankly regret that much valuable time has been lost because we were unable to take the step sooner. The results obtained up to 1925 from the nutrition classes in so far as they can be shown by statistical analysis of weight data, were by no means reassuring. Of the children in nutrition classes in 1925, we were able to trace the weight and height records of 1,241 back to 1923 or earlier. Of these 462, or 37.2 per cent, showed no improvement in nutrition and 287, or 23.1 per cent, showed a lower index of nutrition\* than 2-4 years before, a total of 749 or 60.3 per cent of the whole group who had not shown an improvement in the ratio of weight to height.

There were in December, 1925, 182 children who had been in nutrition classes more than three years. A special investigation of these children was undertaken, including the medical history and physical

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\* For convenience we have used as the index of nutrition the formula  $\frac{\text{actual weight}}{\text{standard weight}} \times 100$ . An index of 90 is equivalent to the usual 10 per cent underweight; 105, to 5 per cent overweight and so on.



findings, the home conditions and social status, the individual dietary habits, the teacher's report and any other data which might throw light on the individual underlying causes of malnutrition. Reports on 103 of these children are available. The medical findings must be regarded as incomplete, since the school physicians still work under the handicap already mentioned.

About 25 per cent had enlarged tonsils and 11 per cent enlarged adenoids or uncorrected nasal obstruction due to other causes. Seven per cent had uncorrected dental defects, 6 per cent had enlarged thyroid glands, 11 per cent had uncorrected ocular defects, 8 per cent had cardiac defects. One child had chorea. Two were under treatment for diseases of the kidney. One had suppurative ear disease. Eight had no discovered physical defects, and seven were not medically examined.

Corrective measures that had been carried out in the group included: 47 tonsillectomies, 25 adenoidectomies, 33 corrections of dental defects, 2 corrections of nasal obstruction, 11 corrections by glasses of errors of refraction; 64 of the children had had measles; 42, whooping cough; 12, diphtheria; 7, scarlet fever; 2, smallpox; 3, pneumonia; 5, influenza; 1, erysipelas; 1, bronchitis, and 3 had had none of these diseases; 8 had histories of contact with tuberculosis.

The survey of dietary habits and preferences must be considered as giving a more satisfactory picture than the probable facts justify, since here we have to depend mainly on the statements of the children themselves. Thirteen drank no milk, or rarely. Thirty-six ate little or no green vegetable. Sixty-six were coffee drinkers, 37 regular and 29 occasional. It was, and probably always will be, impossible to obtain really adequate knowledge, quantitative as well as qualitative, of the diets of the class of children which furnishes the largest percentage of our malnourished group.

Hours of sleep averaged 9 with 18 children; 8 hours or less with 8. Sleeping accommodations in 28 cases were good, the child having a room to himself; in 45 cases, fair—the child having a bed by himself but sharing the room with others; in 23 cases, poor—the bed being shared; and in 5 cases, very poor, the windows being closed.

Home conditions were good in 40 cases; in 19 fair; in 18 poor. There were 24 broken homes where one parent was dead, or the parents

were divorced or the child was in a foster home. Four children were taking professional dancing lessons. Twenty-six children went to movies twice a week; 5, three times. Eighteen children were working for wages. Several had stopped regular school. In some instances the mother was in industry and in these, as well as in others, the child under consideration was taking the responsibility of the family. A fairly common factor was over-activity due to athletic hobbies. Forty children out of the entire group engaged actively in strenuous games.

In November, 1925, the policy of selecting children for health supervision by the height-weight standard alone was wisely changed. All children 10 per cent or more underweight were examined by the school physicians who then decided on the need for admission to the classes. Teachers and nurses and physicians also kept a watchful eye on the other children and supervision was advised for many children less than 10 per cent underweight. The use of our new height-weight table will be discussed a little later.

In March, 1927, there were 90 classes with a total of 2,489 children under supervision. A survey of the physical findings in these children has recently been completed and furnishes an interesting comparison with the 1921 survey. The table is too long to quote but shows among other things in comparison with the 1921 figures for all the school children, 10 per cent less with enlarged tonsils, 7 per cent more with tonsils removed, 11 per cent less with apparent adenoids, 2 per cent less with enlarged cervical glands, 30 per cent less with postural defects and 70 per cent less with dental caries. Making allowances for differences in noting and recording findings there is, I think, a very significant improvement, particularly in the case of the teeth, a matter on which great emphasis has been laid. Defect corrections directly due to health supervision in this group, of which we have records are as follows:

Adenoidectomies 254, tonsillectomies 340, eye corrections 126, dental corrections 443, miscellaneous 19. These do not include corrections made in the cases of 113 children under the care of private physicians. The difficulties of obtaining needed corrective treatment are shown by the fact that in 181 instances parents objected and could not be persuaded to have the necessary measures taken, while in 228 instances they promised to have them taken but had not yet made

good. One thousand, one hundred and thirty-four, or 46 per cent of the children now in the classes, have been in them one year or more. More than half (53 per cent) of the children are over 12 years of age and over three-quarters (78 per cent) are over ten.

In reviewing the work of health supervision, that is to say, the task of attacking the individual problems of malnutrition by individualizing methods, chiefly medical, one is impressed with the great difficulties that stand in the way of accomplishment. The method of approach is, I believe, correct. Every malnourished child deserves a study of his individual case with a view to removing his individual handicaps. Wholesale methods do not fully meet his problem. Yet success in such an approach must eventually rest on active coöperation by the parents, by the teachers, by the medical profession and by the community at large. Little of value will be accomplished unless the recommended measures are actually put into practice. To-day the spirit of willingness to coöperate is, I think, definitely more active than it was six years ago, but we still encounter apathy or antagonism from parents, in some teachers, and principals, in some "defensive" organizations, in some cults and in certain political quarters. A majority of the malnourished cannot be examined below the collar. The attempt to improve hygienic conditions within the home is met with distrust or active opposition—attitudes which are, however, slowly yielding to the wider diffusion of knowledge about health and a growing recognition of the visiting nurse as a friend instead of a detective. It is obvious then that the individual method of approach must depend for its success upon the awakening of the public to its hygienic defects and needs, in other words upon health education in a general sense.

Just how much can be accomplished even in a short time with a group of malnourished children is illustrated by a comparison of two groups in one of the San Francisco public schools. One group was in the health supervision class, in which such things as extra rest, mid-morning milk, avoidance of over-activity, and so on, were recommended but left optional with the children and their parents to carry out. In the second group (open air class) the same recommendations were actually carried out. In the first group 35.4 per cent showed a poorer nutritional index at the end of the period, another 29.3 per cent had remained stationary and only 35.3 per cent showed actual improve-

ment. The average gain for the whole group was but 0.2 per cent. In the second group none of the children showed a loss; 6 per cent were stationary and 94 per cent showed a gain, the average being 3.3 per cent.

Midmorning milk lunches were first served in December, 1921. Beginning in 30 schools, the plan had been extended by June, 1922, to 83 schools and by December, 1922, one year from the start, to 87 schools. At the last report, March, 1927, 84 schools were being supplied with a daily average of 12,273 servings, to about 22.5 per cent of the school population. Approximately 8 per cent of the servings are free, paid for out of the small profit from cash sales, which are placed in a special fund for poor children. The taking of midmorning milk is (excepting in fresh air classes), entirely voluntary. The proportion of children taking milk is about the same now as in 1923 but about 1 per cent larger than in 1924. Originally a piece of bread and butter was supplied with the half-pint of milk, but because of the labor involved in cutting bread and spreading butter on it, the Home Economics Department, which has had charge of the lunches from the beginning, has been forced to substitute crackers.

A very common criticism of the midmorning lunch has been that it interfered with appetite for lunch. The criticism has some physiological foundation, since milk is not completely out of the stomach for 3-4 hours after ingestion. To meet this objection, orange juice has been used instead of milk in the Berkeley schools, and this has been done also in 9 schools in San Francisco to a total of 754 servings daily in March, 1927. It will perhaps be possible generally to offer a choice between milk and orange juice if the demand for the latter grows sufficiently strong. Without wishing to enter a controversy I may point out the special value of milk, with its relatively high caloric content, in meeting the quite common problem of the breakfastless child. In a good many homes, the mother goes to work before her children are up and the child either has no breakfast or gets only a cup of coffee with perhaps a piece of bread. Children in better homes who are not carefully controlled often run away from the table before they have eaten enough. This is particularly true of the late risers. All these children by midmorning need calories more than they need vitamins.

Children who are well fed at home do not need extra calories unless they are malnourished and they need not of course take midmorning lunch if they do not wish or if their parents object. On the whole, the demand for the midmorning lunch has been well sustained over a period of six years and this is doubtless its sufficient justification. We have, however, a few figures which are offered as suggestive rather than conclusive of a definite effect on malnutrition. Six schools were selected as offering comparable conditions. In three of these a high percentage (about 34 per cent) of the children were taking bread and milk while in the other three practically no bread and milk were taken. In the first three the percentage of 10 per cent underweights was 15.9 in 1921 and 10.7 in 1926, a reduction of 5.2 per cent; in the last three the comparable figures were 21.4 per cent in 1921 and 17.4 per cent in 1926, a reduction of 4.0 per cent.

It is of interest to find a notable seasonal variation in demand for midmorning lunches, with peaks in October and November and in March. For this there is no very apparent reason.

During the last year or two cafeterias have been introduced into ten elementary schools, two junior high schools and four high schools. The foods served in several of these have been studied and tabulated by the Home Economics Department. They are of interest to us because we might reasonably hope to see in the choice of foods by the pupils some effect from the dietary teaching which has now been going on for over five years. The high schools particularly should reflect an influence, the pupils having run the gamut of health teaching in the elementary schools. One might reasonably expect to find vegetables, fruits and milk in great demand. The demand for hot dogs, gravy, pie remain heavy in many of the schools, but on the whole the amounts of vegetables, fruit and milk or milk foods served is encouragingly large. The contrast is sharp between the menus of the cafeterias and those of the nearby small shops and restaurants on which formerly the children had to depend for warm dishes and often for all their lunch food. In these places vegetables are rarely served, nor is milk-drinking encouraged, while hot dogs, pop, Eskimo pie, and abominable confectionery make up the bulk of sales.

The School Cafeteria is beyond doubt a most important step in

advance and has great potentialities in confirming in school children the dietary habits advocated in the classroom.

Health education in the pedagogical sense was introduced in San Francisco in 1921, the work being paid for partly by the San Francisco Tuberculosis Association and partly by the Child Health Organization. It was at first confined to three schools which were to serve as demonstration centers. By the fall of 1922 the work was extended to 10 more and by January, 1923, the program appeared to be sufficiently well under way to justify its adoption by the Board of Education for introduction into all the schools. A Director of Health Education was officially appointed by the Board of Education and proceeded at once to formulate a curriculum of health teaching appropriate for all the grades. The curriculum was adopted and formally put into effect by the Board of Education in August, 1924, and has been in force ever since. The details of this plan of teaching need not be here given. It is based on the now familiar principle of teaching health not as a separate subject but as incidental to the teaching of the regular subjects. In this way, the subject of health is constantly held before the minds of the children, and the desired health lessons driven home by illustrative examples and devices.

I have been much more interested in discovering whether or not the lessons of health—the Rules of the Game—have been translated into practice and whether the physical condition of the children has noticeably improved since the introduction of these new methods. Efforts have been made to get objective data but I may at once say that the task has been a baffling one. We have attempted a check on health habits, but the children too often give the answer they think will make the best impression, and the results are of somewhat dubious value. However, a recent performance of 10 health habits in 7 schools shows a tabulation of accomplishment of 86 per cent as compared with 83 per cent two years ago. We have asked the teachers to give comments on their own impressions but the answers have, as a rule, been rather vague or have dealt with the pedagogical devices (many of them, very ingenious) rather than with results. A frequent comment is that the children seemed interested in the method. One teacher frankly states that in spite of the interest shown by the children, she did not know how much their habits had been changed. Perhaps the most striking

effect is found in the case of children of foreign-born families which still cling to their old-world habits of living. Here the children bring new ideas into the home and not infrequently effect changes of considerable extent in family customs. Some of them are certainly for the better, particularly as regards cleanliness, fresh air and the lessened consumption by the children of wine and coffee. A teacher writes: "One child told me he had to wait until his mother went to bed before he could open the windows because his mother was afraid of the bugs in the night air."

I quote another letter dated April 25, 1927, at length:

"About four years ago our school was one of those selected to take part in a special health project. We were to weigh and measure our children every month and to stress 'Cho Cho' and the Rules of the Game.

At that time I had a fourth grade and the children became very much interested in the health work. We had a daily check-up of health habits, rhymes, stories, dramatization and poster making.

We have been asked whether or not all this has actually helped the children. I really and truly believe that it has.

When we started few of the children drank milk. Before long, coffee-drinking was practically eliminated. Now even with our transient population, our no-coffee record is always one hundred per cent.

Cleanliness has never been our problem, but it has been rather uphill work to keep the teeth clean. Now, with the daily reminder and appeal to their pride, we have very little trouble. In all this work we have had the coöperation of the school nurse, and in the case of the teeth, she has been particularly helpful.

With so few of our children going home at noon, it is hard for them to have the proper sort of lunch. Since the first of the year the members of the Parent-Teachers' Association have been serving soup, cocoa and macaroni. That has helped some but we are still fighting enchiladas, hot dogs, soda water and such things.

Living in apartments makes it almost impossible for some of the children to get the right amount of sleep. That has been the health habit that has been most difficult to establish. This term we are concentrating on at least ten hours' sleep every night, and so far the campaign has been quite successful.

Of course, we do not always get satisfactory results, but there are times when that happens with the rest of the school work, too. The children love it, and even if I were inclined to forget the check-up, I am not allowed to. Many parents have come and expressed their satisfaction. Some of them say the children are not satisfied with a perfect health record for themselves, but insist on reforming the rest of the family as well.

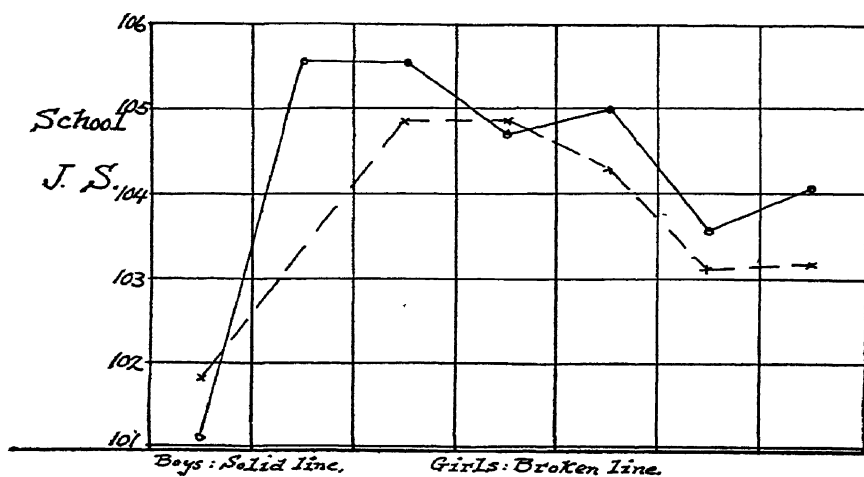
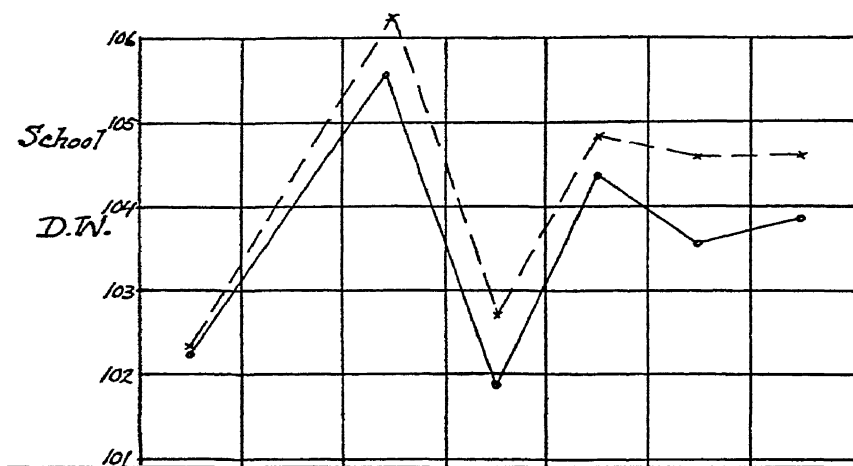
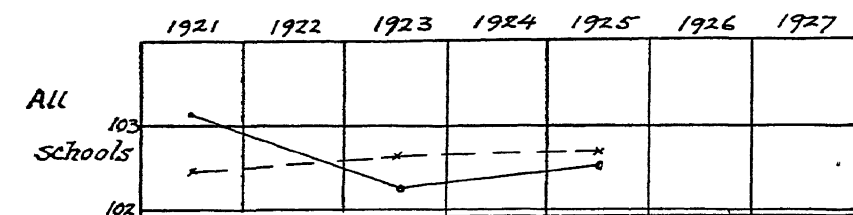
I have enjoyed doing this work very much and if the health habits which the children have formed are practiced all the way through the grades I think it will be worth while. . . ."

One of our workers from the Tuberculosis Association interviewed a number of her teaching acquaintances in an effort to get their personal reactions to the movement and incidentally to form her own impressions of what is being accomplished. Some of the comments that she gathered were: cleaner hands, cleaner teeth, neater hair, better complexions, clearer eyes, less prudery in discussing or mentioning normal physiological functions, education of parents through the children; less opposition to correction of defects, in particular less fear of the dentist; pediculosis now quite rare in some schools.

In two schools, intensive health programs were begun in 1921. In one, the Daniel Webster in the Russian quarter, we employed all the means at our disposal,—special nurse and physician, nutrition classes, home visiting, bread and milk lunches and health education. In the second, the John Swett, the health education program alone was put into effect at first; later bread and milk were introduced. From both we have rather detailed figures of nutritional status; from the first we also have the physical findings, histories, home conditions and so on. There is an interesting contrast between the two schools. Health work in the Daniel Webster school after an excellent start and two good years slumped badly for a time, but has recently somewhat recovered. The John Swett School which began its work in a storm of enthusiasm has continued to keep up a fairly strong interest to the present time, but admittedly less than when its former principal was giving her powerful personal impetus to the work. It is clearly shown by the graph A (page 184) that in 1921 the nutritional index of both schools was slightly below the general average for the San Francisco school population as a whole; that by 1923, both schools showed a very marked increase in nutritional index which becomes even more striking when compared with the slight decline in the general average; that in 1924 following the cessation of the intensive program in the Daniel Webster school, the nutritional index dropped practically to its 1921 level, but happily rose again in 1925, 1926, 1927. In the John Swett school the level of the nutritional index has slightly declined from its high level of 1923 but remains well over 103. Graph B (page 185) shows an initial sharp decline in the percentage of 10 per cent underweights for both schools, reaching in the case of the Daniel Webster

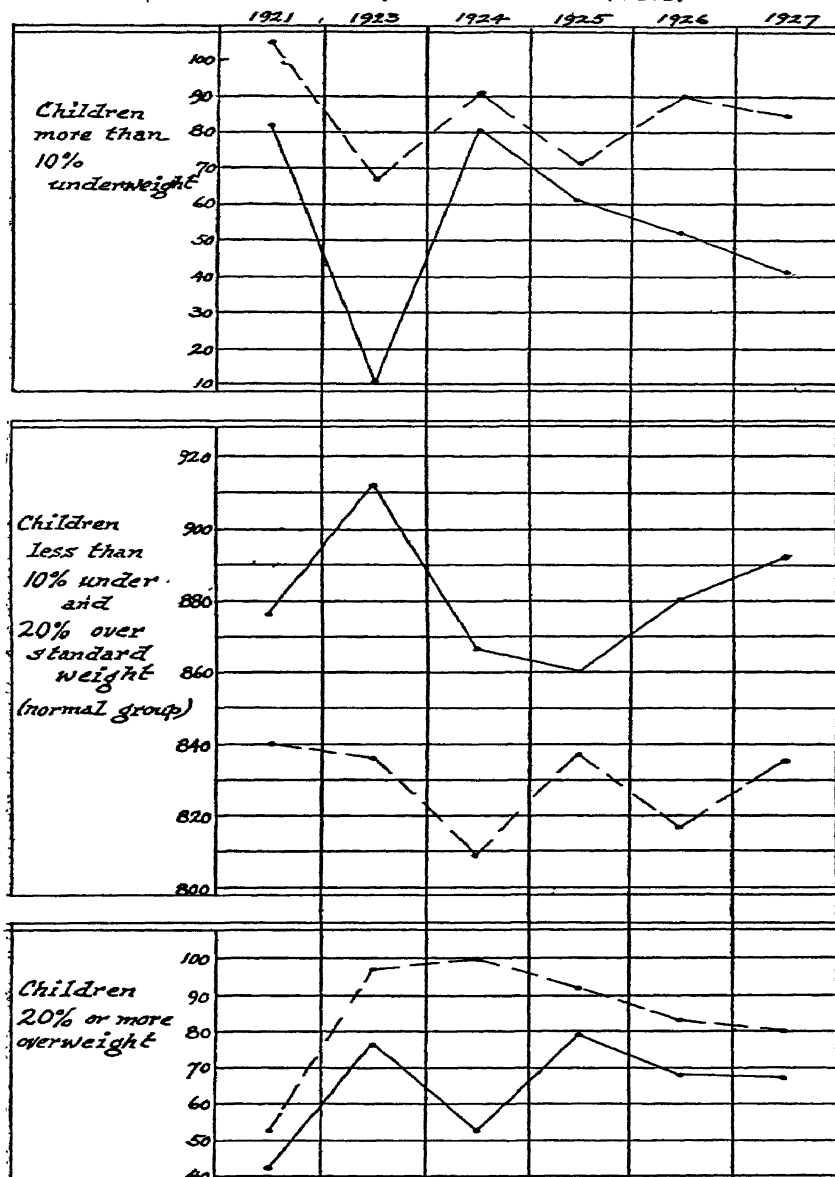


# GRAPH A *Nutritional Indices*



# GRAPH B

## Two Schools with Intensive Health Work.



The figures denote cases per 1000. Both sexes.  
 Broken line = School J.S. Solid line = School D.W.  
 Baldwin-Wood Standard.

school the record low figure (for us) of 10 per cent and for the John Swett school a little less than 7 per cent. These figures are to be compared with a slight but definite increase for all the schools during the same period.

Simultaneously the percentage of children in the normal zone rose at the Daniel Webster to over 91 per cent, remained stationary at the John Swett and declined slightly for the general school population. In both schools the percentage of overweight children increased 4-5 per cent but more in the John Swett. In the subsequent period, parallel conditions in the John Swett have with minor fluctuations remained at about the 1923 level, while in the Daniel Webster they have shown a strong tendency to recover from the slump of 1924. For the general school population, we have not as yet been able to complete our compilations later than 1925. Conditions as a whole, as regards proportion of 10 per cent underweights, proportion below 100 and proportion in the normal zone were slightly worse in 1923 than in 1921, and slightly better in 1925 than in 1923. It will be recalled that by 1923 the health program (excepting bread and milk lunches) had not yet been introduced in a majority of the schools. We have not yet completed the analysis of the 1926 figures,\* excepting those of the 7 per cent underweights, an item which we compiled for comparison with the original 1921 survey. In 1921, there were 9,394 children in this 7 per cent underweight group out of 44,500 weighed or 21.1 per cent of the total. In 1925, there were 6,836 out of 44,890 weighed, or 15.4 per cent and in 1926 there were 6,816 out of 47,338 weighed, or 14.3 per cent. The 1926 figure shows a reduction of 1.1 per cent from 1925 and 6.8 per cent from 1921 or in absolute figures, about 2,500 fewer children in the 7 per cent group now than when the work began.

I may say that these and other weighings used in our compilations have now run well over 200,000 in number.

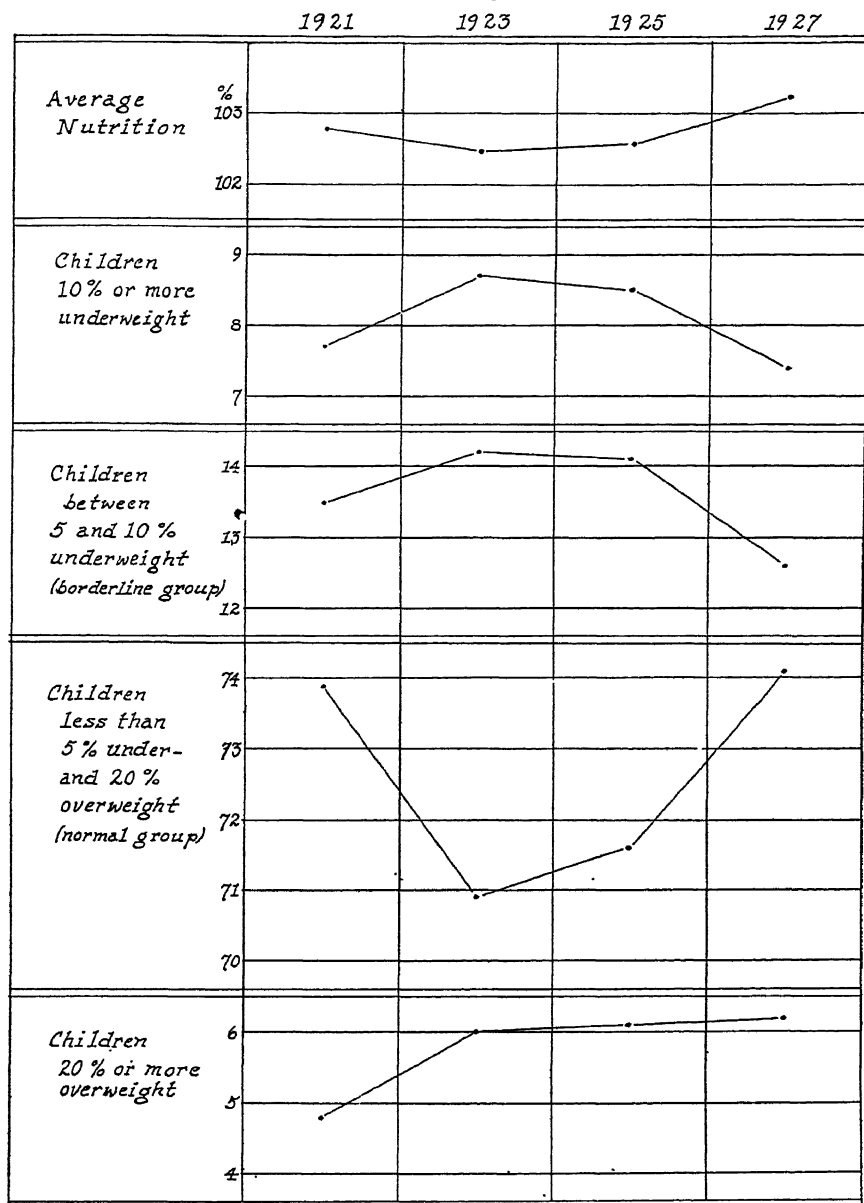
I should like to interpolate at this point a few remarks about height, weight standards, and the criteria of under- and overweights; and to show a standard table worked out for the San Francisco children which has now been adopted for the San Francisco schools.

The 7 per cent and 10 per cent criteria of underweight were widely

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\* Since the presentation of this paper, the 1927 data for all schools have been compiled and the results are included in Graph C (page 187). They all show a gratifying improvement in the general nutritional status.

GRAPH C



Nutrition calculated from Baldwin-Wood Tables.

Figures (except in top frame) denote percentages of the total number of children recorded in the study for the given year.

adopted throughout this country some seven or eight years ago. Doctor Emerson, who advocated the 7 per cent criterion believed and preached that all children 7 per cent or more underweight should be regarded as per se, malnourished. Doctors Holt and Wood, who advocated the more liberal allowance of 10 per cent, were much more conservative in their claims, recognizing that there was merely a probable, but not a necessary correlation in individual cases between this degree of underweight and malnutrition. Nevertheless with the almost universal introduction of weighing and measuring in the schools, the widespread campaign against malnutrition in the desire for some definite criterion, 7 per cent or 10 per cent underweight was very generally used as synonymous with malnutrition. How this myth, in spite of its considerable content of truth, was exploded by Dublin, Gerhardt and Schroeder and by Taliferro Clark and his associates is of course a familiar story. They showed that a considerable proportion of children 7 per cent or more underweight were, on physical examination, found to be free from physical defects and, too, some children, though not so many, less than that percentage under standard weight, were malnourished, or at least not free from significant physical defects. Important racial differences were also discovered, although these differences in Dublin, Gerhardt and Schroeder's Italian group were associated with a high incidence of rachitic bony deformities, only incidentally racial. Such deformities often decrease height and hence tend to increase the ration of weight to height. The group findings therefore may have been influenced by special pathology and perhaps do not invalidate the general applicability of the tables quite so much as has been thought. That malnutrition is not wholly a matter of low weight for height is of course a medically self-evident fact and that there will be overlapping in weight and height ratio between normal and pathological children is statistically inevitable. The fact remains, however, that the vast majority of normal children have weights nearer the general average of weight than have malnourished children and that if we keep in mind the necessary reservations and modifying factors and if we have a criterion of uniform significance at different ages and for the two sexes, we may properly continue to put height-weight tables to practical use with probably better promise of success than if we depend upon subjective impressions of physicians, nurses, nutrition workers and teachers—the only practicable alternative.

The selection of a reliable criterion is the vital point. It was at an early period apparent that a single standard (whether 7 per cent or 10 per cent) was of varying significance according to age and sex. For example, we found very few children under seven years who were 10 per cent under average weight while, as I have already mentioned, over 75 per cent of our 10 per cent underweights were found to be ten or more years of age, and there were marked differences between the sexes, particularly as regards overweight. The question arose whether abnormal states of nutrition were actually commoner with older children and with girls than with boys, or whether we were dealing with a normally greater variability. That the latter is the case is quite obvious from a study of the distributions both of weight and of height, even were it not clear from a medical knowledge of the incidence of malnutrition at different ages. Granting the normal increase in variability it was necessary to find criteria of under- and overweight which would have equal value for boys and for girls of various ages. To this end, it was proposed to use the 10 per centile points, obtained from large series of cases as criteria for both under- and overweight. These points as you know separate the lowest and highest tenths of a given group from the intermediate 80 per cent. Under this plan the underweight allowance ranges, for boys, from 7 per cent at age five to 9 per cent at age fourteen; for girls, from 7 per cent at age five to 10 per cent at age fourteen. The corresponding overweight allowances are, for boys 9 per cent at age five to 13 per cent at age fourteen; for girls, 9 per cent at age five to 17 per cent at age fourteen. No claim at all is made that the percentages given as criteria mark a sharp line between normal and pathological children. The only claim is that the criteria have the same significance at the different ages and for the two sexes.

Since the practical use of varying percentages is sure to be burdensome and confusing, standard tables have been prepared, based on San Francisco average weights for height, age and sex (which are a little higher than the Baldwin-Wood), and on the criteria of variability above discussed. These tables show the "normal" range (expected to include about 80 per cent of cases at each datum). They do not show the average figure. Children below the lowest weight shown are given a special physical examination, or are reported to

parents with recommendation of examination by the private physician. No diagnosis of malnutrition is made on underweight, but a presumption of malnutrition is created which must be further investigated. The omission of the average weight is, I think, a great advantage. So many parents have been unduly alarmed and angered by reports on the school cards that their children are underweight, when the degree of underweight has been altogether insignificant, that considerable opposition to any weighing in the schools has been aroused.

Surveying the health work of the past six years one is perhaps a bit disappointed that more has not been accomplished or, that, at least, we cannot offer more striking concrete evidences of progress. I suppose that in 1920 we were transferring our hopes of a millennium from the war to health education. No doubt we subconsciously envisaged a world of children, a few years hence, all of whom were clean, healthy, strong and perhaps a little fat. We now, of course, realize that, while our original enthusiasm gave the work a strong initial impetus, progress and accomplishment must be gradual; that habit and custom are strong and slow to yield, and that some of the factors in malnutrition in children are intimately connected with economic and social conditions which we can influence only with the greatest difficulty.

After all, the accomplishments of these six years are not so slight. We have defined our problems and have set up effective machinery for solving them in their individual and immediate aspects and in the more general aspects that look toward the future. The machinery set up by private organizations has been turned over to the public, where it may permanently function.

We have, in our more strictly medical work, made much progress in the detection and correction of handicaps.

At least 60 per cent of our teachers are actively and in most cases intelligently and interestingly teaching the basic laws of health and their practice in our schools. Children are learning to take pride in health and all that goes with it—are learning to be ashamed of defects in personal hygiene that they complacently accepted a few years ago. Knowledge of hygienic matters is seeping into the home and gradually resistance to ameliorative efforts is lessening.

We have learned by the mistakes as well as by the successes of the last six years where our best opportunities lie.

*Doctor Wood:* This paper well illustrates the value of practical statistical study, and we may hope to have many more of this type just as rapidly as possible.

Our next subject is Fitting the Child's Education to His Mental and Physical Abilities. This will be presented by Dr. Kemp.

## THE SCHOOL AND CHILD HEALTH— FITTING THE CHILD'S EDUCATION TO HIS MENTAL AND PHYSICAL ABILITIES

ELEANOR C. KEMP, Ph.D.,

*Director, Psychological Center, New York League for Mental Hygiene of Children*

BEFORE I started my present work as clinical psychologist, following the line of my deep interest in education and in psychology, I went to Johns Hopkins for the medical point of view. While I have not taken my degree as a Doctor of Medicine, I have passed my psychological examinations, and clinical examinations, and taught for five years in a medical school.

My particular interest has been to see what could be done to prevent the present great increase in nervous and mental diseases. Most of the medical schools—and I studied in three—gave us no idea as to what is meant by a normal child, mentally. We have talked a great deal, in psychiatry, about the normal and abnormal, but how to tell those norms, a course on the normal mind is needed. Many of us feel that psychology should have a place, as it does in Johns Hopkins, in the curricula of our medical schools.

I am proud to say that I have had the pleasure of coöperation with neurologists and psychologists in New York, and that my medical training is enough to enable me to work intelligently with them.

I was asked by the Hon. William C. Redfield to convey to you his good wishes as the president of the National Institute of Social Science, and the assurance of the Institute's interest in this meeting to-night.

My paper will be more of a popular paper, and less of a statistical



paper, than my predecessor's. The problem that Dr. Palmer asked me to present, was a message to parents, as well as a message to the educators. I have addressed my remarks to their interests rather than to the interest of those who are attacking large statistical problems.

Great stress has been put on the physical side of the child, as evinced by the work in dental clinics, eye clinics and in adenoid treatments, and so forth.

The mental health side is a very recent interest in the life of the child at home and in school. It was interesting to me to hear Doctor Veeder say that he felt that education took only a part of the whole development of the child; but it is a part, and it is a very vital part, and it should orient itself fully into the life of the individual. This can only be done by the close coöperation of home and school.

The school often puts forth one ideal, and the home another, and the child falls down between the two. We do not realize how we are thus sowing the seeds of mental and nervous difficulty in the life of the child. We know nothing, in psychiatry, of insanity as a state without mind. This is a legal term. When the individual ceases to function in unity, and society may be endangered, the law steps in and calls him insane.

Psychiatry knows of mental illness, of the lack of coördination of the mental system or of the mental powers.

Now think, if you will, with me to-night how important it is to keep that great unity in the life of the child, at home, in school, in life, if we are going to prevent the splitting of the personality, which occurs in all of our mental and nervous cases.

In order to make this a little clearer, I am going to call the attention, particularly of educators and parents, to two definite efforts to preserve this unity of ideal of home and school. It has been my privilege and pleasure to take part in what I consider two very great experiments to thus unify the life of the child. One is in the suburbs and the other in the city of New York itself.

In the suburban school the little children are brought to school by their parents. A chart is made out for each child and placed where parents can readily reach it. When the parents bring the child they note on this chart the difficulties that they have had to meet over night. If the child has had stomach trouble or has had particular difficulties in

eating or sleeping, or a tantrum, those things are put down by the parents who bring the child.

The teacher in the preschool class looks over the chart, and the handling of those children during the day depends upon what she finds on the chart. I cannot go into details as I have studied them and advised the young teacher, but I can say that there has been a tremendous improvement in the disposition of those children, in the doing away with bad habits, because of the close coördination between the parents and the teacher.

In addition to the parent-teachers meeting of this school where general discussions are held, many of the parents who have particular faults to combat come to the teacher for interviews. Notes are made of the life of the child, so that the parent, talking it over with the teacher who has been given an insight into mental hygiene will realize that the problem is one that calls for coöperation of home and school. Perhaps her little girl has been going around picking up things. Some people say she steals. The mother says, "Why, she picks up everything at home. Her grandmother even lets her have her pearl necklace. If she picks up everything at home, I suppose she thinks she can do so at school." The need of both parent and teacher seeing the situation as the child did, helped the home and the school to work together and to teach her the difference between *meum* and *teum*.

Another school in the city is trying out a like problem, and has successfully carried it on for six years. It is my privilege and pleasure to examine those children as they enter the school. This is not the mere giving of a psychological test, important as this is, because it enables us to compare children of all types by the same scale, but it is the interpretation of those tests in the light of the facts of home ideals, brought out by interviews with father and mother. We see both the father and the mother. If they are unwilling to coöperate with the school, that school is unwilling to take the child. I will cite you one case. A little girl came to be examined. Her attention period was about that of a child of three. I could secure her coöperation with very great difficulty. She showed but the slightest interest in the things of childhood.

After careful psychological tests, I brought the child down to the principal's office, and she expected a very, very promising report from

me. She was a finely built and beautiful child. As generally happened, we had a conference. I said, "The child is below par. I think there must have been an absolute neglect of any kind of regular habit formation in the home." She said, "This is very surprising. This woman is one of the most brilliant women in the city." I said, "I cannot help it; she is not a brilliant mother, because the child shows neglect."

I asked the mother about habit formation. How long had the child sucked her thumb, if she sucked it at all? "She still sucks it." I asked, "What do you do?" "I bind it up, especially at night." That is the easy way and the wrong way. "Then, what about bed-wetting?" "I get up myself, two or three times every night, to take care of the child." "But, madam, do you think that child is ready to come to a school? You have not felt it wise or necessary to see that this child drops off these baby habits and forms those normal for her age. She is not ready for school." Well, we had a very lively time. The father called it "Fuss and nonsense!"

We are making a worthwhile experiment at the particular school, that is we know we can do a great deal for the child if we get the coöperation of the parents. This school offers a rich curriculum. It tries to fit this to the mental and physical ability of the child. Beautifully located, opposite a park where all children play an hour a day, it also teaches language and music and rhythmic dancing, drama and art. These form part of the work of every child in the school. In English, literary insight, history, and science, the sixth and seventh grades pass into the high-school grades and in all the three R's they are quite up to the average of other schools. I am not a member of the faculty, but am called to give the achievement tests. This is an objective and scientific way of gaging the pupil's work. The program fits the child's needs, trying to round out its life emotionally. The intellectual life is quite up to that of the average private and public schools.

This school is now working towards a very important problem. We are most interested in meeting the needs of adolescence. We know how dry—tasteless—is the intellectual dose the average high school curricula offers the young girl and boy. They are alive emotionally and instinctively, and no one considers this. The only idea is to get into college. If they have been fully developed by a rich program it will be quite unnecessary for them to do as much as they do, intellectu-

ally, in high school. It is very necessary, if we want them to develop a unified personality, to give them more experiences in subjects like art, music and creative literature in this adolescent period.

The effort of this school is to see if we can so educate or so fit a curriculum to the child, that he will take his high-school tests and college work and be healthy in body and mind. This school provides a rest period for every child, a free hour in the park, every day; playing games, and when skating is on they are taken to the pond to skate. It is quite as essential and better for a child to exercise that way than it is in a gymnasium, and the teacher of physical training goes with the classes to observe them at play and help those who need special attention.

This school hopes it can so help our adolescent girls and boys, by giving them a rich curriculum, to educate themselves emotionally as well as intellectually. The school and home working together are thinking of them in their whole personality, thinking of the whole youth; because it is the youth, and not only his intellect, that goes to school. When this is not done the graduates of our high schools are often rebels. Here we get our suspicious and antagonistic youths. They carry over into life their emotional difficulties and repressions and become social problems.

#### THE IDEAL PARENT

The parents need to know this so that the parents and teachers may work together for the unifying of the child's nature. The New York Leauge for Mental Hygiene of Children in its last meeting had a discussion on "The freedom of youth—what shall we do about it?" I wrote to ten young people of the adolescent age, between sixteen and eighteen, one of them a little older. They received the letter a day or two before the meeting. I said: "Quickly and briefly write and send me a statement of what you think the ideal parent ought to be." I received the most remarkable answers, and I read them at the annual dinner a few days ago. I have brought two or three of them here and I would like to get your reaction, because I would like you to see how these young people are thinking for themselves, and how necessary they

feel it is for you, their parents and their teachers, to consider them in their entirety—in the fullness of their personality. The letters follow:

"He should maintain himself in his dignity as an adult, and try to reach a second adolescence.

"If he feel control of the outlook and actions of the child necessary, he should exercise such control without the child being conscious of such control.

"He shall never allow the child's fear of his anger, horror, disgust, contempt, or punishment or hurt, to overcome the child's desire for sane advice.

"He shall refrain from hysterical condemnation of his child's point of view in favor of his own."

"See Samuel Butler."

Here is another one:

"In my opinion ideal parents are those who are wise enough to know when to leave their children alone to learn by their own experiences, and when to intercede and tactfully guide the children in the right direction. Such parents are interested in their children's growth in every way, but do not become so absorbed as to forget or lose interest in their own individual or personal pleasures and labors.

"An ideal parent should not condemn a child for anything the child might do, that the parent does or might do, also. Neither does this parent expect the child to do or think or say what he does, just because the children are his.

"Patience, reason, and tact are the chief attributes of an ideal parent."

I wrote to a girl at school, and I think one came from her and one from a friend. They are as follows:

"For a child to discuss a subject such as this would have been impertinent fifteen years ago. It shows our advance when we realize that arbitration can be applied, not only to wars, but also to that most ancient of battles, the revolt against necessary authority.

"Children are never fond of being commanded. Since parents find their easiest way to get something done is to command, they use that method. Then when the child is not given reasons for the actions it must perform, or told, 'You don't have to know; it's enough that I said to'—the child comes to regard its parent as a tyrant. When the child finds out that this self-termed all-knowing being is not so unfaulty, and does not know everything, the child is contemptuous and begins to exult in whatever superiority it possesses over the former commanding parent.

"Therefore the basis of parent and child relationship must be made one of friendship. True, a friendship in which the elder is obeyed, but obeyed because of respect for superior knowledge; not because obedience is commanded.

"How does one establish a basis of love, friendship, and respect?

"The ideal parent will never tell a child to do something blindly, for that will set him apart from the child as a ruler, not a mother or father.

Second, he will answer questions when he can, and admit it when he cannot.

"For thus there will be a human, and not a 'god' basis. Also an ideal parent will find importance in what a child thinks is important. There is nothing so estranging between parent and child as the different scale of what is big to each and what is not.

"An ideal parent might well create this impression in the mind of a child: 'My mother (or father) is just like me, only she knows a little more because she has lived longer. She is often cross and tired, as I am, and I should consider this, as she is kind to me when I am tired or cross. We are great friends, but not selfish friends; for we both have the other's interests, and both respect each other's different lives. We love each other, not only with a friendship love, but with a different love; a mother and child love. This love must not extinguish other things, but it must become a great friendship and a silent thing in the background of our lives.'

"All this must be the subconscious attitude of the parent and child.

"A man or woman who can create such a background of life for his child is certainly an ideal parent."

That was written by a girl about sixteen. Her friend said:

"The ideal parent should be, I believe, one who understands human nature with a degree of intelligence. There are many different kinds of children whose parents have fixed rules for their upbringing. It matters not if the child is slow, quick, bright, or dull, it would get the same treatment as one of a different nature. Therefore the first concept of my ideal parent would be one who studies his child and caters to him accordingly."

Do you see how the affection, how the longing to be understood, how the deep down desire in the hearts of these young people is very sincerely expressed in their ideals?

"My other requisite for an 'ideal parent' would be one who would look at the world through the eyes of the child. Be able to look just a bit ahead, and instead of just warning the child of a danger, explain to it what should happen if it should pursue the course being taken. He should be interested in the child's interests, and be always on the look-out to give the child a helpful bit of advice in a helpful manner.

"With these as a background it could be an easy matter to have helpful, pleasing children in one's home and companions for one's leisure hours."

I was talking to a graduate of Vassar at my club the other day, and she and I concluded that the thing that most interfered with our having our children as companions in our leisure hours was the lack of fireplaces, and the prevalence of steam radiators. I think that has a good deal to do with it; but may I be very practical and say that the radiators need not be allowed to interfere. Youth may like to sprawl

on the floor, as one did, and said to me one evening, "I have the most lovely poem to read to you." "All right; let us hear it"; and we have it under a drop-light, as we had not a fireplace.

I read you those letters so that you could see what our children are demanding of us as parents. They show the need of unity in life—of coöperation of home and school and of the absolute need of fitting our plans to the child's needs.

I spoke to a forum of youth in Brooklyn, not long ago, and I also had the pleasure of meeting the youth movement in Heidelberg two years ago, in a congress of educators. These youths were not invited to that congress, but they came in and asked one of the professors and myself to meet them in the moonlight outside on the balcony, where they could discuss with us their aims. I assure you, what they felt was told sincerely, and what they hoped to accomplish was going to give them something to do. They themselves had realized the lack of unity in their lives, the neglect of the training of the emotional and instinctive life, and the overaccentuating of the intellectual.

We feel that it is in the hands largely of the parents to understand what the schools are trying to do, and to work in coöperation with the schools. Parents must realize that their point of view towards their child at home makes a tremendous difference in his attitude towards life in school and thereafter. The ideals must blend and work in unity.

We have the problem of the boy who is not a literate type. I would like to cite this case in a brilliant family of six children, the elder boy happening to be what I call a non-literate. He went to school, and in the evening his father said to him, "What did you learn to-day?" "Oh, dad, I have learned to spell; but I have forgotten what it was. May I go and look in the closet?" He looked in the china closet, and then he came back and very joyously he said: "I know. J-u-g, pitcher." And of course his brothers, who were literates, and brilliant, roared with laughter. His father said, "Try it again. Did you learn anything else?" He said, "Yes, something else." Looking at the table, he said, "D-i-s-h; plate."

Now, there was a child as different as could be from those other children. I cannot go into his history, but I do know that he was laughed at and was made to feel inferior; he was considered stupid. He had the kindest heart, and the most affectionate feeling for others,

despite the way he was treated by his brothers, but he became entirely discouraged; the school was all book work, and there was no chance there for this boy to do anything with his hands, no chance for him to dig in the ground or to invent or construct. He loved and could do hand work. He said one day to his father: "I wonder if the man who owns that big lot there would let me plant vegetables for poor people. I could learn a lot from planting vegetables." Finally that boy ran away from school. That was a number of years ago.

Now, look at those two other boys, who, if they had been examined intellectually, would have stood much higher than this non-literate boy. One of these brothers is an ordinary grind, a clerk, and shows no signs of being anything more. Another is working away in a commercial firm. The stupid boy has developed a manufacturing system down in Florida and is running a factory of his own, using electric power and employing a number of people, and he is doing much better than his brothers. There was a boy to whom neither home nor school life gave a chance to orient himself and to make a unity of his life. The school augmented the literate side, and the father also augmented the book side. He was marked a failure because he did not fit into the rut of school, while it was the school and home that failed to discover this boy's real ability.

When it comes to the question, How shall we meet the many questions of our children about life, its origin, source and aims? I would go a step further than those who would teach the parents how to answer their questions in the parent-teachers association. As I told the late President Elliott, I think it is time we women evolved a college of our own where the children would not be just an interest on the edge. Bryn Mawr does something; Smith does something, and Vassar does something; but I mean that these important psychological and sociological laws are so vital to the life of our nation that I think we should have at least one college for women where biology, psychology and sociology are considered essentials, so that future parents may be told how to answer the many questions of life; how to speak to the little child; how to speak to adolescents. It is a question of biology and psychology; and then, around these, all the other subjects that make for motherhood, fatherhood, and wholesome home life could be related. I said this at a meeting one day, and a young man rose and asked:



"Doctor Kemp, I expect to marry and be a father. I do not see why there should not be such a college for fathers as well as for mothers." I see no reason why there should not be such a course for fathers; and I believe this whole matter of orienting our child into life in the home as in the school is so complex and so difficult that our young people are beginning to feel it, and to realize it, and through them, perhaps, some day, at least one if not more types of colleges may be evolved where the child is considered in its entirety. When we look back upon what women have done in these United States, the women who have succeeded in the world are largely those who have become physicians or psychologists or nurses or teachers, and in these professions they have all had to do with children. Spasmodically, women have succeeded here and there in other professions, but those who have the greatest gift of understanding children will be the women to influence the future. If that was the direction in which some of our colleges were moving, perhaps the unity of life at home and in the schools and the high schools and colleges would be considered more wisely than it has been in the past. We are throwing out upon our country a great group of university men and women to-day as parents. These often say to me, "But, Doctor Kemp, I never got any help in bringing up my children at college." We are beginning to realize how little we know of the mental hygiene of the different life periods. We need to educate parents, and then they will coöperate with those teachers who are trying in every way they can not to fit the child to the system, but to evolve a system of education that will fit the child's needs instinctively and emotionally as well as intellectually.

*Doctor Wood:* We have one more paper on the program, the one by Doctor Dublin.

# CHILD HEALTH PROTECTION OR NEGLECT: THE ULTIMATE COST TO THE COMMUNITY

LOUIS I. DUBLIN, P.H.D.,

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I AM not a little surprised to find myself engaged, at this late date, in an attempt to answer the question whether it really pays a community to neglect its children. How can anyone seriously ask such a question to-day? The question is a direct challenge to our moral sense. Decent people and decent nations will tell you that they do not neglect their children, irrespective of cost. The spokesman of any community in the United States where such a question were asked would throw it back into our face as an inexcusable affront. Yet, in spite of this show of righteous indignation, we know very well, as active workers in this field, that the health of our children is neglected on a large scale; that in spite of our pretensions of love for children and our general assurances that nothing is too good or expensive for their welfare, we are, in fact, very niggardly in our provision for the health of American children. I suppose that my function this evening is to measure with some definiteness the ultimate cost to the community of this neglect and to bring home to our people how ill-advised and how contrary their parsimony and indifference really are.

Our program to-night has touched several times on our provisions for public education. In this field we are not a bit parsimonious. From the very beginning, our people have dedicated themselves to the proposition that children must be liberally educated and that education is worth what it costs. Anyone who would dare at this date to thwart the ever-widening educational program would be run over in spite of the obvious fact that our program of education is experimental and in many respects unsatisfactory. The more advanced communities spend well over a hundred dollars a year per child and think nothing of it. Parents in better circumstances who look after the education of their children through private channels spend four or five times as much a year and look upon this expenditure as a good investment.

The answer seems to be that the amount spent for education, if it be reasonably well spent, pays for itself in helping to produce self-supporting, substantial citizens.

My plea to-night is that what is true of education is equally true of health protection, perhaps even more so. We, in the health field, are on more certain ground. If anything, the development of health is more fundamental than of education. The healthy body determines the healthy mind. But as a nation we have not yet learned to carry over this liberal and constructive attitude to the protection of child life. We appear too ready to forget the many hazards to which children are exposed both from disease and accident and to disregard the effects of malnutrition, and the numerous other influences that stultify the growth of children. These contingencies which are so real in the life of children can and must be met. Neglected, they result in rearing persons who, however well educated, are incapable of the best citizenship. What sense is there, I ask, in spending a hundred or more dollars a year per child for its education and then neglecting to spend a few additional dollars which would make it possible to reap full advantage from the educational process?

The chief source of community waste the country over results from an immense amount of preventable sickness and death. We know also where such sickness and death are concentrated. For the most part, we find them in the earliest period of life—in the first day, in the first month, in the first year, and in the first ten years of childhood. It is at the beginning that the human animal is most friable, and it is there that we suffer our greatest losses. Let us see what the situation, at these ages, actually is.

In 1900, only a quarter of a century ago, the mortality of infants in the newly established Death Registration Area was 169 per thousand midyear population; or, we may say that 17 per cent of all babies who were counted in that census year died in that year. In 1925, the figure was just over 75 per thousand mid-year population; that is, between 7 and 8 per cent. The rate has gone down steadily during this period and is still declining rapidly. In 1926, the infant mortality rate may be only 7 per cent, or considerably less than half what it was a quarter of a century ago.

This figure, however, is an average and covers the country as a

whole. There are some communities, in fact a great many, that still have high rates and a large number where the rates are very much lower than the average. Thus, in 1925, the Statistical Report of Infant Mortality issued by the American Child Health Association shows that of the 697 cities reporting, 90, or 12.9 per cent, still had infant mortality rates in excess of 100 per thousand births. On the other hand, there were eight communities with rates as low as 35 per thousand births or less, and 70 cities, or 10 per cent of the total, with rates under 50 per thousand births. The cities in the Pacific Coast States have had with few exceptions very low rates for years. San Francisco, Seattle, Portland, Oakland, and many others show how favorable conditions for infant life may be made. But there are many eastern cities that do almost as well. The figures for Bridgeport and New Haven, Connecticut; Cambridge and Newton, Massachusetts; Mount Vernon and New Rochelle, New York; and Orange, New Jersey, indicate that in spite of less healthful climatic conditions in the northeastern states, infant life can be safeguarded and that year after year rates of mortality can be kept to between 4 and 5 per cent of the total births. If in the course of the next fifteen or twenty years, additional medical discoveries become available to increase the skill of physicians, and if sufficient facilities, both public and private, are made available to instruct and care for mothers during their childbearing period, the infant mortality rate may be reduced to well below 3 per cent. But even if 3 per cent be the limit, such an achievement will reduce the number of infant deaths in the United States in any year from the 180,000 which now occur to a little over 70,000, or a clear saving of about 110,000 infant lives a year.

After the infant has passed through the dangers of the first year, it is still confronted with any number of hazards in the second year and to a lesser degree, until it reaches age 5. The earlier years of schooling present their difficulties, and there are hazards to be considered even for the young adolescent up to the age 15. In the course of the last twenty-five years, the mortality of children from 1 to 4 years of age has declined from 21 per thousand to a little over 6 per thousand, or about 70 per cent. I estimate that this mortality can be reduced to 2 per thousand. Between 5 and 9, the mortality has declined from 5.1 per thousand in 1900 to 2.1 per thousand in 1925. This can be

reduced to 1 death per thousand. Between 10 and 14 years, the mortality has declined from a little over 3 per thousand in 1905 to a little under 2 per thousand in 1925, and this also can be reduced to 1 death per thousand living at those ages.

When communities the country over have waked up to their opportunities to control the conditions which are still destroying the lives of children and take advantage of the knowledge and practices which preventive medicine have put at our disposal, the sum total of the reductions in the mortality of children will be enormous. I have already estimated that there will be a saving of 110,000 lives of infants. In addition, we may count on 34,000 lives of children between 1 and 4 years, close to 11,000 lives between 5 and 9 years, and about 7,500 more between 10 and 14; or, counting all of the ages under 15, the amount of child life capable of saving will spell a total of 162,500. This is the stake for which we are playing. The question is: Is this stake worthwhile? Can we afford to pay the price of saving these lives?

The very first step in the solution of this question is to determine whether human lives are worth saving and whether disease is worth preventing. I have attempted in another place to calculate the value of human life at various ages. The method was to determine the amount of wealth that human beings at various ages produce in excess of the cost for their birth and their maintenance. The infant just born is an economic asset because it has cost money to bring into the world and because, if it be allowed to reach maturity, it will produce more than it cost to bring up, plus what it will cost to maintain it. Our wealth is increasing because of the existence of human beings who have the capacity to produce more than they consume. I need hardly go into the details of the method. It has been subjected to careful criticism and stands to-day unquestioned and the findings substantially correct. These findings, after all, are what you are interested in. At birth, the American baby boy is valued in excess of \$9,000. At age 5 the corresponding figure is over \$14,000, and at age 15 in excess of \$25,000. These figures were calculated on the assumption that the children would ultimately be found in the average economic class, that is, among those who at their maximum earn about \$2,500 a year. The figures for girls were assumed to be half those for boys at the same ages.

We can now estimate in dollars and cents the cost of our preventable child mortality. The wastage of children under one year old brings about a loss of \$1,175,000,000 a year, and for children under 15 years of age the loss reaches the astounding total of \$2,200,000,000. This is the amount which the country would ultimately gain were these lives saved and allowed to reach maturity and play their part in the nation's work.

It is much more difficult to make specific calculations of the cost of preventable sickness in infancy and childhood because of the almost complete absence of trustworthy records. But we may, nevertheless, attempt some estimates with a measure of safety. After all, children under 15 years of age constitute about a third of the total population, and we know that they suffer their share of illness. A number of years ago, the Metropolitan Life Insurance Company carried out an extensive investigation into the amount of sickness prevailing in the families of its policyholders. We found that 2 per cent of the population was constantly and seriously ill. Children under 15 in these studies showed a lower rate, 1.1 per cent, which is equivalent to an average of four days of disabling sickness per year per child. In a recent investigation of sickness in Montreal, we found that children under 15 showed a much higher rate of sickness. It was 2.3 per cent constantly sick. This would be equivalent to well over eight days of sickness per year per child. The location of the cities and the different seasons of the two investigations probably account for much of the difference in the two studies. A third investigation of the amount of cost of sickness which we made among the members of the families of Metropolitan employees indicated that the average annual expenditure per capita was about \$19. For children, the average annual cost was \$8.40 per capita. These amounts are probably a little higher than the average for the general population because of the rather favorable economic status of these employees. But on any basis, and considering the amount of sickness among children as disclosed in the previous sickness surveys, the most conservative estimate of the cost of illness among children I can make cannot be less than \$5 per child per annum. Every parent knows how great a financial strain is occasioned each year by the recurring illnesses of children. But for our purposes it will be safer to use this minimal figure, \$5, which the present lack of data make it

necessary for us to employ. This would mean a total of close to \$200,000,000 a year as the approximate cost of medical, nursing and other care of children during illness. The most disconcerting part of this picture is, of course, that so much of the drain due to illness is unnecessary and preventable. What excuse is there to-day for thousands of cases of sickness and of death which actually occur among children from a variety of conditions which we have the means absolutely to prevent. Yet they are not prevented. It is a source of bewilderment to me to understand how a nation whose people are so gifted in business practices as Americans are supposed to be can allow such a condition to exist.

This then is the measure of our neglect of child life and health. Combined, the figures reach a grand total of two and a half billions of dollars a year. What do we now do and what are we asked to do to stop these staggering losses? The parent, in so far as he acts as an individual, to-day does little more than attempt to repair the damage done by disease. We have already seen the amount he spends in trying to make good such damage to the life and health of his children. But this method of attack is almost hopeless. Most parents are ill informed as to the hygiene of infancy and childhood, and they are unable to cope with the situation which the conditions of life in our cities have brought about. The congestion is so great, the proximity of individuals so continuous, and the opportunities for cross-infection so constant, that the problem of keeping children well is not so much one for the individual parent as it is a community problem for common solution. The keynote is not cure but prevention. And, if prevention is to be practiced, it must be effected not by the parent alone but rather through the agreement of parents, that is, by the community and through its official representatives. This is how the health departments and the non-official health agencies have risen and their functions made definite during the recent decades. They function for the group because that is the most effective and most economical way to function under present conditions.

Let me give you a few striking illustrations of the effectiveness of certain organized health agencies, both public and private, in their attack on child wastage. As I have already indicated, the first year of life is the most fruitful field for labor. It is then that the largest

number of children die unnecessarily. It is this wastage that can be stopped. Think of what was accomplished through a demonstration lasting little more than three years in the small Canadian town called Thetford Mines. In this French Canadian community of 9,000 persons the infant mortality rate in 1920 was close to 300. The usual activities of the maternity center were established; mothers were educated to take advantage of the facilities offered by the nursing organization; doctors were taught to cooperate; babies were visited and their nutrition carefully supervised. By 1926 the infant mortality rate had dropped to 79. This rate is still very high. I give it only as an illustration of how easily this loss can be brought under control. There are hundreds of other communities where similar reductions have occurred.

Perhaps the most interesting illustration is the work of the Maternity Center Association of New York, which, some years ago, organized an effort to reduce the mortality of early infancy, that is, within the first weeks and months of life. It was recognized that the deaths from injury at birth, from congenital malformations, and from other diseases peculiar to early infancy had scarcely been touched by the developing public health program. The Maternity Center Association made available to pregnant women the facilities of its welfare clinics, where qualified physicians gave advice and also sent nurses to the homes for the instruction of mothers in the hygiene of pregnancy. As a result, the prematurity rate of the infant was reduced to 4.8 per thousand births; whereas, in the general population of the City of New York, the rate in the same year was about three times as high. Even better results have been obtained in other clinics especially when a good obstetrical service was combined with the prenatal clinic care. In Detroit, in 1925, the babies born to mothers who attended the prenatal clinic showed remarkable reductions in their early infant mortality. For these reasons there is no longer any ground for believing that the deaths in early infancy are inevitable. They are within control, provided mothers receive intelligent care during pregnancy, careful attention at confinement, and the infants receive good care during the first month of life.

After the first year, when the conditions of early infancy, diarrhea and enteritis, and pneumonia, have done their work, such conditions



as diphtheria, whooping cough and tuberculosis are the principal destroyers. Every one of them is certainly capable of considerable reduction. It has been demonstrated to the hilt that deaths from diphtheria are utterly unnecessary and can be prevented by any community that makes up its mind to do so. The work of Doctor Sears in Auburn has shown the way. In that community of 35,000 they have had three years without a single death from diphtheria; although, prior to the beginning of the intensive work, cases and deaths ran high. In 1922, for example, the number of cases was 97, and the deaths 13. But with the campaign to immunize the child population by means of toxin-antitoxin, the number of cases dropped at once to 47 the next year, and the deaths dropped to four; and since that time there has been but one death in that entire community. The record of New Haven, a city with a population of over 180,000, is almost as good. In that city there was but one death from diphtheria last year as the result of the campaign of Doctor Rice, the city health officer. Essentially, Doctor Rice's program was very much the same as Doctor Sears'. With the coöperation of the physicians of the city, he has succeeded in immunizing virtually the entire child population against diphtheria, and it is now hoped that for some years to come the excellent record of this city will continue.

Tuberculosis follows diphtheria as the most important of the communicable diseases of childhood. It, too, can be very materially reduced both as a cause of sickness and of death. The very marked reductions that have occurred in most advanced communities in the number of deaths from tuberculosis meningitis is already an excellent indication of what may be accomplished. But tuberculosis of the respiratory system is capable of great declines in so far as they affect children. This fact is amply demonstrated by the experience of Framingham, Massachusetts, where some years ago the demonstration of the Metropolitan Life Insurance Company was carried out under the auspices of the National Tuberculosis Association. While this demonstration was not primarily directed at the children, they more than any other group have shown a favorable response to what was done in the community. The demonstration set up excellent machinery for the physical examination of old and young, provision for school health work was made, and a campaign of education was launched for instructing the entire

community in the dangers from tuberculosis, especially. I am privileged to call to your attention some unpublished results that have followed the demonstration. Doctor Chadwick of the Massachusetts State Department of Health, having surveyed Framingham among other Massachusetts communities, reports that while, for the state as a whole, the percentage of children classified as having hilum or glandular tuberculosis ranges from 3.3 to 5 per cent, only 2 per cent of the children in Framingham have this condition. The most remarkable fact is that the present survey found only one case of pulmonary tuberculosis among children in the schools. Only 26 per cent of the children from 5 to 15 showed positive tuberculin tests, an extraordinarily low record. An x-ray study of 347 high school pupils showed not a single case of pulmonary tuberculosis or any other disease of the lungs. While it is a far cry from Framingham to most other communities of the country in respect to the extent of public interest, the results in this demonstration city are, nevertheless, capable of general repetition, provided the work is undertaken and carried out with the same degree of intelligence and thoroughness as characterized the demonstration in Framingham and the work undertaken since.

Let us now consider the question of cost. How much are we now spending for the conservation of child life and how much would it be necessary to expend to do the work in a satisfactory manner. An investigation made by the American Public Health Association, shared in also by the American Child Health Association, has shown that work for children is one of the principal activities of the typical American health department. Yet it was found that, in the larger cities, not more than 59 cents per capita were being expended annually for what might be classified as child health work in its various branches. This is about 67 per cent of all that is spent by departments of health. These 59 cents cover infant hygiene, the prevention of communicable disease among preschool children, medical inspection in our schools, and other school hygiene work, and a proportionate share (one-half of the total) of all other health activities which may be assumed to include the care of children. We do not know how much more is spent by the non-official agencies, but in many communities these private organizations are very active and spend, if not as much as health departments, a considerable fraction of this sum. But it is safe to say that in the general

run of American communities from seventy-five cents to a dollar per capita would more than cover all of the expenditures which could possibly be allocated to this branch of community health service, whether official or non-official.

It is only too apparent that the health agencies of typical American communities are not anywhere well enough organized to conduct adequately the work for the protection of children. The departments are altogether too often insufficiently manned, the workers are ill-trained, suffer from insecure tenure, and do not have the necessary assistance of nursing and other personnel to carry on their work. The very interest and enthusiasm of the community which could be enlisted to co-operate with the health workers for the care of children are neglected because there is no one competent to carry on a campaign of public health education. It is only here and there that the way has been shown. I have already referred to the conditions in Framingham, where a truly remarkable result has been achieved; but in this community less than \$3 per capita are being spent for all types of health work and possibly not more than \$1.50 per capita would cover what is necessary for the protection of children. In an outline prepared by Professor Winslow of Yale University of an ideal health department, it was assumed that an expenditure of just under \$1.50, if properly administered in a well-organized department, would serve to carry on the activities for child welfare in a modest but effective manner. My own impression would be that more like \$2 to \$2.50 under present conditions would be necessary to accomplish this purpose.

But what an absurd contrast between these minimal sums of what is required per capita to conserve child life and the value of the child when its life and health are endangered by our neglect. An expenditure of \$1.50 per capita would mean a total expenditure of \$175,000,000 throughout the country for the care of child life. To-day the loss from child sickness alone is more than this sum and that of preventable death more than ten times as much. We are as a nation spending about \$40,000,000 through our various official and voluntary agencies, national, state and local, for the conservation of child health, and because this sum is inadequate we are wasting a good part of it. We must learn how to increase our expenditures for this purpose five-fold. This then is my answer to the original question put to me, namely,

Does it pay a community to neglect its children? The answer is, obviously, it does not pay; it does not pay morally; it does not pay financially. If we were moved only by the crudest and coldest calculations of dollars and cents, we could not afford to neglect our children. They are the most valuable assets we have from every angle. Every penny we spend along approved lines will bring us returns literally ten-fold and satisfactions of a spiritual order which are beyond measure. And this is the lesson we have gathered from the study of our past experience, from our failure to do the obvious things in our rich country. There can no longer be any excuse for continuing the disgrace of the neglect of our children.

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WEDNESDAY, MAY 11

*Morning Session*

*Presiding:* HUGH S. CUMMING, Surgeon General, United States Public Health Service

TRENDS IN FEDERAL AND STATE CHILD HEALTH WORK

The Public Health Service

HUGH S. CUMMING, Surgeon General

Bureau of Education

JAMES F. ROGERS, M.D., Chief, Division of Physical Education and School Hygiene

Children's Bureau

MISS GRACE ABBOTT, Chief

Department of Agriculture

MISS MIRIAM BIRDSEYE, Extension Agent, Nutrition Extension Service

Minnesota Department of Health

A. J. CHESLEY, M.D., Secretary and Executive Officer

Indiana Board of Health

ADA E. SCHWEITZER, M.D., Director, Division of Infant and Child Hygiene

Connecticut Department of Education

A. B. MEREDITH, Commissioner of Education

Virginia Board of Health

MARY E. BRYDON, M.D., Director, Child Welfare Bureau



# THE PUBLIC HEALTH SERVICE AND CHILD HEALTH WORK

HUGH S. CUMMING

*Surgeon General, United States Public Health Service*

I HAVE been given the privilege of presiding over this meeting this morning, and those who got up the programs evidently had a good deal of confidence in me, because apparently they have given me the privilege of taking unlimited time in telling what my own service has done, as a start for the meeting. But I have noted the number of papers that are to be presented to you this morning, and in view particularly of the fact that the several States are to report their work, and having in mind that almost all of the work of the Public Health Service has been in coöperation with the States, with the exception of certain research problems, I think as a matter of fairness I should not burden you with any paper.

You have evidently heard, and probably heard repeated once or twice, the whole history of the child health movement. Unfortunately, I have been out of town, and have missed some of the papers, but I am quite sure that some of the speakers have started back in the days of the Israelites and the Romans, and have traced the full history of child health work down to the present, but from my own personal knowledge I think it can be said to have begun about 1894. I do not know that I state that date because I happened to graduate in medicine about that year, but that is commonly said to have been the date of the beginning of the conscious public health activities in child welfare.

So far as the Public Health Service is concerned, I think we are beginning to realize probably more and more every day that you cannot exactly say that this activity is devoted to the improvement of children, and that one to middle aged people, and this one to old maids, and that one to bachelors. Each part of the public health movement must be correlated with the other activities, and in that sense, of course, all of the public health movements of the States, of the municipalities, and of the Federal Government and other activities, have been toward the improvement of child health. The most important or fundamental public health work, in lessening mortality and morbidity among children



and infants, has not been directed consciously towards the infant, but there are two great movements, which were not due entirely to doctors, I may say, but as well to sanitary engineers, that is, the improvement of the water supply of municipalities and of rural districts, and, following that, the improvement of the milk supply, which have had that effect. I think men like Doctor Crumbine will agree with me in that.

My first recollection of the work of the Public Health Service along that line was when I was first ordered to Washington in the laboratory many years ago, when they were studying the question of typhoid fever in the District here in connection with the milk and water supplies, and, following that, people began to appreciate what was called the Mills-Reineke phenomenon, which you evidently understand. Doctor Schereschewsky, I think, and Doctor Kerr were busy in those days studying the effect of pasteurization on milk, and there was quite a clinic being run down at the laboratory. I think that was about the first work in which the Service engaged directly toward betterment of children.

The Public Health Service has contributed to the advance of child hygiene by direct and indirect activities. The early efforts of the Service toward the production of a pure water supply has had its effect in the reduction of diarrheal diseases in all ages. In 1908 the Service published a definite contribution to health literature in the bulletin on "Milk and Its Relation to Public Health." This publication was of material aid in the adoption by State and local health officers of more adequate measures for safeguarding milk supplies. The Service is now conducting very important researches in connection with pasteurization.

Malarial and trachoma surveys were early contributions to improving conditions of the health of the child in certain sections of the United States. The Service is now making an epidemiological study of trachoma. Research studies on malaria are being carried on at present.

The early work in the control of hookworm infection in children was carried on by a Service officer.

The supervision and control of the manufacture of biologic products so largely used in the prevention and cure of disease of childhood has long been a function of the Service.

In 1912 an Act of Congress authorized the Public Health Service to study and investigate diseases of man and conditions influencing the propagation and spread thereof.

Prior to the enactment of the Federal Hygiene of Maternity and Infancy Law the Service carried on extensive investigations in child hygiene administration in several states, but subsequent to the Federal Act in 1921 the child health activities have been curtailed to varied research studies.

The use of dried milk powder as a substitute for cow's milk where cow's milk is not attainable was approved.

Mouth hygiene and its relation to growth, development and school progress was studied. A system for mouth rating has been in satisfactory use for several years.

The value of the height-weight ratio as an index of physical fitness has been given careful analytical study. The nutrition of an individual child cannot be judged solely by a table, yet this practice is still widely prevalent in the schools to-day. This rule of thumb use of a table brings much dispute to the value of school health work.

The sanitary survey of school buildings was one of the first studies in child hygiene by the Service. Results of studies in natural illumination of school buildings have been published. Preparations are now being made for fundamental studies in natural illumination.

Mental surveys of school population were made to ascertain the prevalence of feeble-minded children. Studies of numbers of mentally and physically handicapped children are now under final analysis for publication. Physical and mental states of negro children have been made and one of a series of articles has been published.

Two special studies are being conducted over a number of years. One in school vision is being made to determine actual visual defects and change which occurs in the eyeball with advancing age. The other, a study of the growth and development of children, has been under way for several years and should reveal interesting and valuable information.

Studies in goiter in children were begun in 1923. The phases of the work may be grouped under (1) goiter surveys and resurveys, (2) effects of simple goiter, (3) educational work. These surveys have shown that treatment of simple goiter should always be individual and under the direction of a physician.

The Service has just published an analysis of the Health Department Practice of the 100 largest cities in the United States. The child welfare activities of these cities received careful analysis and should be of interest to all public welfare workers.

*Doctor Cumming:* I am going to ask Doctor Rogers, of the Bureau of Education, to tell you what that bureau is doing in child health work.

## THE BUREAU OF EDUCATION AND CHILD HEALTH WORK

JAMES FREDERICK ROGERS, M.D.,

*Chief, Division, Physical Education and School Hygiene, United States  
Bureau of Education*

IT IS significant in more than one sense that we have been asked to review the trends in school health work over so brief a period of time as ten or fifteen years. In the first place no such review would have been thought of half a century ago, and in the second place if such a thing had been attempted there would have been little or nothing to review.

We have been carried along rapidly of late by the impulse of research in hygiene, but the science of one age is often the nonsense of the next and that having to do with health is especially fickle because the phenomena with which it deals are so very complex. Moreover, the fine quality of zealous concern and anxiety to be doing something for humanity which is characteristic of the health worker often leads him to seize upon the semblance of truth and to put it prematurely into practice.

The work of the Bureau of Education for the improvement of school buildings and school sanitation has gone forward steadily through this period of fifteen years. Save in the matter of ventilation, our ideas in regard to building, equipment and sanitation have not changed materially.

Taking up the report of the Commissioner of Education for 1911-12, we find especial mention of medical inspection, open-air schools and school lunches. The writer of this section of the report conceives medical inspection as merely a means of preventing communicable disease, and such was its scope at that time. In fifteen years there has been of course a decided change, the emphasis having swung to the examination of the child for physical defects. The medical inspection of those earlier days must be given credit for ridding the

schools from vermin to a large degree, and for promoting personal cleanliness.

With the exception of smallpox and diphtheria, the school medical inspector is largely helpless in preventing the more serious communicable diseases, including all respiratory affections, and for this he is in no sense to blame. We must await further developments in means of prophylaxis.

These fifteen years have seen not only the beginning of the routine examination of school children by the physician, but some decline in favor of the nurse and the teacher. The Bureau has insisted that it is the business of the teacher to know the pupil, and to know the pupil is to know from day to day whether he sees, hears, breathes and otherwise behaves normally. The school physician is none the less important, however, and it is a pity that in so many instances he is still of a second or third order of merit.

In passing I would note the very serious neglect of medical inspection of high school pupils along with general absence of health work during this period. We seem to be making little progress in this field, though there is no end of interest in athletics and no shortage of funds for coaching winning teams.

Medical inspection began over a half century ago in our colleges, filtered into the elementary schools and very recently has been applied where it should have started, to the child of preschool age. The Bureau has done much to promote the development of such work in this early period.

The second item mentioned in the Bureau report for 1911-12 is open-air schools. The first of these schools had been opened (the report states) in Providence in 1908, so they were a comparatively new feature in connection with public schools. They were badly named, for open air was only one of their features, attention to nutrition (by special feeding, rest, and so forth) being every whit as important. The open-air school can now be looked upon as an admission that the ordinary school does not furnish a healthful atmosphere for the school child. Happily there is a strong tendency to make all schools healthful with pure, cool air, to see that all children are properly fed, rested and exercised, and that those who are actually tuberculous are placed in sanatoria where mental tasks will be at a minimum.

The third item in this annual report concerns the school lunch. The writer begins: "The school luncheon, though of comparatively recent origin in the American city, has gained rapidly in recent years. The early hour at which some children get their morning meals, the scarcity of breakfast in the case of some, the unwholesomeness of confections and other edibles sold to them by vendors, and the late hour at which many must get their noon meals at home, all argue forcibly for the school lunch and under proper supervision by the school authorities." We do not need to review the progress which has been made in both city and rural schools in the serving or supervising of the noon lunch, though as regards the mid-morning lunch which came into vogue of late we believe there is a wise tendency to try to secure, instead, an adequate breakfast at home.

The next topic in the 1911-12 report is sex education, and we read: "It is now generally admitted that there has been a certain timorousness or false modesty connected with the imparting of knowledge of the biological facts of the human organism and especially of sex relations and some efforts have been made to meet the need for proper instruction. . . . The most favored method of instruction would seem to be by comparative biology, but this has its limitations and lurking dangers."

Whether sex instruction should or should not be given in public schools, the "timorousness" and "fear of lurking dangers" has subsided in some degree since 1912, and we believe that we are on the way to believing that, whether before or after puberty, facts about sex taught in a straightforward way can have no other effect than good. Otherwise the child will either obtain his information from a vicious source or he will remain ignorant. The Bureau of Education has coöperated with the Public Health Service in its efforts to soothe the frightened educator who has seen nothing more nor less than the shadow of his own unhappy experience in securing an education concerning matters of sex, and to give him saner attitudes on the subject.

The growth of the playground movement was also mentioned in the early report and fortunately this movement has continued steadily. The Bureau has emphasized the importance of the school playground as the finest piece of physical education apparatus ever invented and has urged its adequate preparation by drainage and surfacing, and also

its wise supervision so that it may be of greatest use to the greatest number of children.

In the Commissioner's report for 1913 there is mention of the completion of the building for the Forsyth Dental Infirmary, and those who are acquainted with the recently published methods of dental prophylaxis worked out in this institution will recognize that we have made great progress in this field in these few years. Progress in nutritional studies in this country and abroad bid fair to direct us in the way of removing the curse, disgrace and the expense of rotting teeth at some not very distant time.

There was mention, in these comparatively recent reports of progress in education of the deaf and blind, but there is as yet no mention of classes for the hard-of-hearing, of sight-saving classes, for those with defective speech, or of special schools for children crippled in limb. The publication of the Bureau bulletin on Public School Classes for Crippled Children was issued in 1918.

The influence of the war is to be noted in the report of 1916 in mention of legislation by New York State for physical education and military training, and this marked the beginning of much legislation on the first named subject. As the law usually included in its scope the teaching of hygiene, this legislation has been doubly significant.

Health habit teaching came into vogue about ten years ago, and the Bureau has been a source of many publications on this subject. While there has been no change in its attitude toward the importance of this work, it has been emphasizing of late the fact that the health habits are carried out largely in the home, and that we will not get very far in this work until the parents are informed, and brought into sympathy with, what the school is trying to do for the physical welfare of the child. The most evident mistake in all our school health work, in the past 15 years, from medical inspection to habit teaching, has been our neglect to take the parents into our confidence.

Of especial importance in the development of school health work has been the subject of nutrition. I do not refer of course to mere under-weight, which is of much concern, but the malnutrition with which at least 90 per cent of us are affected, and which exhibits itself objectively in rickets and rotting teeth, and which is the hidden cause of many evils which we are combating in the branch instead of at the

root. We are all awaiting impatiently for further light from the laboratories on this subject.

Looking back over these fifteen short years, one is surprised at the progress made and, as far as we can judge from such nearby observation, at the few errors we seem to have fallen into.

As regards the position of health in education, it is theoretically that of a youthful and beautiful heir whose card, by courtesy to public opinion, has been posted at the front door of his rightful residence, but who practically is often relegated by his older brothers to a scantily furnished hall bed-room on the third floor back. Nevertheless there are signs that in time he will be allowed to inherit his possessions and share equally with his relatives. It will be a happy day for all concerned when this recognition occurs.

*Doctor Cumming:* Miss Abbott will tell us what the Children's Bureau is doing.

## THE CHILDREN'S BUREAU AND CHILD HEALTH WORK

GRACE ABBOTT,

*Chief, Children's Bureau, United States Department of Labor*

I FEEL as though everyone here knows what the Children's Bureau is doing, or is trying to do, in the field of child health. Some of you who know the bureau only as a child health agency may not realize, however, that in addition to the Maternity and Infant Hygiene Division through which the Maternity and Infancy Act is administered by Doctor Blanche M. Haines, the director of the division, and the Child Hygiene Division which conducts research in the field of child health under the direction of Doctor Martha M. Eliot, the bureau has also an Industrial Division, a Social Service Division, and a Statistical Division—all in charge of experts in their respective fields. All of these are contributing to the bureau's Child Health program and all of them find the health or ill health of children cause and effect in industrial and social problems. However, I believe that I am expected to devote the few minutes assigned to me to the health work of the

of the Child Hygiene and Maternity and Infancy Divisions of the bureau.

From the very beginning the Children's Bureau has been especially interested in *infant* welfare, and has tried to concentrate attention upon the baby because we think it is beginning too late if you begin with the preschool child, and very much too late if the program begins with the school child, or the adolescent child. We are, of course, interested in the other age periods, but we feel the importance of focusing attention on the period of infancy, not only for the foundation of health, but for the foundation of right mental life also. Each year we are interesting an increasing public in what is actually being done for the baby, and in what might be done if the information now available were widely practiced.

The bureau has also continued to call attention to the relationship between economic and social conditions, dependency, and the numbers of families living below the margin of decent existence in relation to the problems of health, particularly in relation to infant mortality and the morbidity of children. Accumulating evidence reënforces the conclusions that these social and economic conditions are factors in our child health problems.

We are also increasingly eager to see the child health program develop into a nation-wide program. One of the great American vices is, I think, our habit of being satisfied if we have developed a method of doing something. We are all very much interested in it while it is being developed and is in the experimental, demonstration stage, and then once we are sure of the results that follow the establishment of certain kinds of agencies or institutions our interest flags, and we usually stop very far short of making universally available what has been demonstrated as needed to meet a universal need. As a result, we can show whether in child health, or the care of delinquents, or the care of dependents, or any other field, in or near practically any city some of the best things that are being done and some of the worst things that are being done for children anywhere. One reason why the Children's Bureau has been especially interested in a Federal subsidy for maternity and infancy work is because of this very fact. We believe that the States should be the leaders in the development of a State-wide program that reaches into every county and every community in the State.



Without adequate leadership supplied by the State there will continue to be large blocks of counties that are doing nothing, and large blocks of counties that do not understand what can be done by the local community to safeguard the lives of mothers and babies. The maternity and infancy funds have enabled the States to assume this leadership in promoting the welfare and hygiene of maternity and infancy. The money that has been made available by that act has been used by 43 States—next year it will be 45 States—in making really State-wide an appreciation of needs and local provision to meet those needs. The Federal Government has with the coöperation of the States accepted the challenge which the size of this country offers, and the States have been enabled to reach all kinds and sorts of babies in all kinds and sorts of places—white and black and red—old American stock and recent immigrant—in the towns, on the farms and the ranches, and in the mountain districts.

If American children are to be healthy, happy, and efficient, American parents must give scientific care to their children. There is no substitute for informed and intelligent parents. Even in the school period, the school has the child for some six hours a day and the parents have it the rest of the day, and the loyalty to the teachings of the home is much more fundamental than the loyalty to the school. In the early period of life, when the most important physical and mental habits are formed, the home is almost the only environment the child has, and during this very early period it makes or mars the life of the child. The Bureau's experience is that most parents are eager to become intelligent in the care of their children, and we find that under present conditions the best teaching agency in health and habit formation during infancy and the preschool period is the child health center where the doctor and the nurse, who are especially trained for this work, meet the individual mother, and tell the individual mother about Mary and Johnny, instead of about babies in general. This is not to minimize the value of general education in child care. The classes in child psychology and the institutes that are being held are of great practical value, but to even the most intelligent parent there comes that very difficult question of applying the information that has been acquired to the individual child. For this, nothing is a substitute for the pediatrician and the nurse working from the child health center.

We must, I think, keep on saying to ourselves that the opportunity for that kind of education ought to be made available to an increasing number of mothers every year, and that this educational service ought to be put on a permanent local basis more widely each year. We are able to report such progress in the past, but we shall become satisfied with our efforts, and stop long before the service is really State-wide unless we decide to steadfastly resist the American tendency.

When I am asked what results the States are getting in their maternity and infancy programs, I am reminded of how as a child I ran out to pull up the beans I had planted the day before to see whether they had begun to grow. We are expecting results long before we can have results in a program that is planned to reach eventually all the mothers who desire scientific information about the rearing of their children, and an opportunity to secure the kind of concrete information they need to have.

Increasingly larger numbers of children are being placed under the supervision of private physicians, as the child health centers have demonstrated the importance of keeping children well. And it must be a great satisfaction to physicians to have their skill thus intelligently used. All too frequently in the past the physician was called in as the child was about to die. He did not tell the mother that the death of the baby was unnecessary. Instead, he gave such comfort to the mother as he could. The educational work which is being done in connection with our child health program is giving the doctors not only a chance to keep the children alive but to make them really physically fit. If physicians have not always appreciated this fact it is because they have not understood what is being done.

In general, as you know, the Children's Bureau has two functions—to investigate, and to report on our investigations. The bureau tries to keep up its study of what might be done that has never been done before, its evaluations of pieces of work that are under way, the conditions under which they succeed or fail. We also try to make our reporting as successful as possible. We take a very liberal viewpoint about what constitutes a report. We report in very formal phrase to Congress in an annual report which is not very widely read, but on which I spend a good deal of time. We report in long pamphlets and short pamphlets, in news releases, and films and posters,

and anything else we can use in order to get the facts understood. And in this reporting we have, as you know, had the coöperation of local public and private agencies and individuals.

We get a great many letters in the Children's Bureau from individual mothers. We try to report to every individual mother who writes in just as intelligently as possible, but we have a form for the last paragraph that goes into every letter saying: "You have in your State a State department of health, with a child hygiene division under the direction of so and so. If you will write to Dr. Blank he will be glad to help you." The bureau is eager to have these enquiring parents connected with the local agencies and to look to them for help.

When I go before an appropriation committee, I do just what any of you would do, I explain the importance of money in a child health program. But, as a matter of fact, the question of how much money the Children's Bureau actually expends in Washington is relatively unimportant, compared to whether it is able to command the coöperation of parents and agencies in an intelligent use of the material and the services the Children's Bureau provides. How far the program of child health actually becomes a part of the care actually given children is the important question.

Some of the bureau's publications have been a success, judged by this test. Its bulletin on Infant Care, which all of you know so well, is, I have been told, the most popular government bulletin that has ever been published, and that there are more sales at the Government Printing Office of that bulletin than of any other. There used to be a very popular one issued by the Department of Agriculture, on the horse. Infant care is now more popular than the horse, but I will not say that I feel sure it is the activity or the intelligence of the Children's Bureau that has made it so. I think there are other factors which have made the horse recede into the background, and have put infant care at the head of the procession for the moment at least. We would like to think that it was because people really care tremendously about what happens to babies. I think they do care tremendously, but they do not always realize the relation between the efficiency of parents and the health of babies.

We have had, I am glad to report, increasing evidence of the interest of fathers in this important subject of child care. It has been

especially manifested in connection with the bureau bulletin on "Child Management," by Dr. Thom. When it was first issued, the *New York Times* ran an editorial with the heading, "You will want to write for this bulletin," and described what was in it. In the next day's mail the bureau received about a thousand letters from in and around Wall Street, dictated, I am sure, by very prosperous business men to their secretaries. They were asking for "Child Management," not in order to help somebody else with his children, but in order to help with their own children. I am quite sure that on the night they got the bulletin they went home to dinner with a good deal to contribute to the dinner conversation about what ought to be done for the children, and I hope they had a new understanding of how in the future they might coöperate in the family problem of child rearing. The fathers are perhaps more interested in problems of discipline, and consider their contribution to such a discussion more valuable than they do to other problems of child health. Unquestionably the father's attitude toward what is done for the baby and the other children, as well as what he himself does with and for them, is a great factor in successful child care. I hope, therefore, that all of you are cultivating the interests of fathers as well as mothers, and grandmothers; and may I say maiden aunts also, because I have personally discovered their opportunities and obligations.

During the time that the American Child Health Association has been in session I have had an opportunity to talk to many of you. I hope that many more of you will have an opportunity to visit the Children's Bureau. We are eager to serve in any possible way those of you who are on the firing line in the local communities, and if we are not doing the thing that is helpful, we ought to know it, and we ought to change what we are doing. We shall be grateful for suggestions. We are eager to coöperate with the American Child Health Association in its program because we have found it helpful and stimulating in developing a well-balanced child health program.

I am sure that, so far as the Federal Government is concerned, I may speak, not only for the Children's Bureau but for all its other bureaus and agencies, when I say we desire to set an example of the kind of coöperation with one another and with State and local agencies

that will indicate that we hope to move forward together toward a really very great end.

*Doctor Cumming:* I am going to ask Miss Birdseye if she will be good enough to read her paper now.

## TRENDS IN THE WORK OF THE EXTENSION SERVICE FOR CHILD HEALTH

MIRIAM BIRDSEYE,

*Extension Agent in Nutrition, Office of Coöperative Extension Work,  
United States Department of Agriculture*

THE Coöperative Extension Service in Agriculture and Home Economics is carried on by the United States Department of Agriculture and the agricultural colleges of the 48 States. This service is not concerned, as is the Public Health Service, primarily with matters of public health, though directly and indirectly it fosters many of the practices recommended by that organization. Nor is the Extension Service concerned, like the Children's Bureau, primarily with the life and work of children, although a large part of its teaching is carried on with boys and girls between the ages of ten and twenty, more than half a million of whom are enrolled in the Boys' and Girls' 4-H Clubs. Unlike the Bureau of Education, the Extension Service is not concerned primarily with the schools, though in most States it maintains a close coöperation with them, and in a number it exercises a notable leadership in health education methods.

How then does the Extension Service deserve a place in this symposium on trends in child health work by governmental agencies?

The Coöperative Extension Service in Agriculture and Home Economics contribute to child health in rural districts by working with the child as a member of the rural family, for it is to the men and women, the boys and girls of the open country that the Extension Service is commissioned by the Smith-Lever Act to bring "instruction in better practices in agriculture and home economics," in order to raise the standard of the rural home and to increase the contribution of the farm to the life of the nation as a whole. And so it is to the con-

tribution of agriculture and more particularly of home economics, at work with families, children and community housekeeping in the open country and the smaller rural towns, that I shall invite your attention in the few moments we have to discuss the place of the Extension Service in the child health program.

This is an economic and social program which makes a many-sided contribution to child health in the rural districts, for apart from its direct services, anything which increases the income of the farmer increases his ability to support measures within the home and community looking to the improvement of child health.

I would like to point out that this is the first time on this program—and I believe the first time on the program of any annual meeting of the American Child Health Association—that the services of agriculture and home economics in the cause of child health have been discussed.

You see, we are at last getting to this home, the importance of which has been emphasized by the previous speaker. Of course, we know that most children come from homes, and, in this paper we are going to discuss the contribution to the child health program of the people trained for leadership in the methods of managing and ordering a home for the day-by-day upbuilding of the family in health and happiness.

I am, therefore, to speak not only as an extension worker, but also as a member of the great body of women trained in home economics, in discussing briefly a few of the contributions of the Extension Service to child health.

Extension work, as many of you know, is carried on by the county extension agents, men and women, and the State staffs of agricultural and home economics specialists, working usually with organized groups or clubs of adults and of juniors. The county workers live at the county seats, and the state workers reside at the State Agricultural colleges and go out to help the county workers. Close coöperation is maintained with State and local health and school authorities, with women's organizations, civic organizations, groups of business men and others.

In the time at my disposal I can speak only very briefly of a few of the high lights of the service that is being rendered to child health,

and in order that you may appreciate the rural setting in which this work is done, I shall throw on the screen some slides which will illustrate these points as I take them up.

The health of children is probably most directly affected by the work of the home demonstration agents and the nutrition specialists with organized groups of home makers and with the 4-H Club girls on such subjects as food selection for the family, child feeding and food preparation to retain the greatest possible content of minerals and vitamins in our food, and to tempt the family appetite.

Bringing the farm food supply to the point where it provides the milk, eggs, vegetables, fruits and meat needed for the adequate nutrition of the farm family is another direct contribution to child health. This includes the canning and storing of food for use in the non-producing months. In some States the extension service is guiding the distribution of agricultural products to insure a more adequate supply of foods needed to maintain health in certain sections where they cannot readily be raised.

I want to point out that this development of an adequate farm food supply is a basic contribution to the child health program which is not being undertaken by any federal or State agency other than the Extension Service, and without which the rest of the program will lag behind or fail entirely in rural districts. I think workers who are coöperating in the rural child health programs understand this very well. If you do not have milk and eggs and vegetables available on the farm or in the country store, what is the good of teaching food habits in the school?

We may picture a woman in her food budget garden. She has planted vegetables in accordance with the nutritional needs of her family, as she has learned them from the home demonstration agent and the nutrition specialist. If she carries out their suggestions, this home in the open country will also have fruit trees and small fruits, a good milk cow, meat animals to supply beef and pork, and a flock of 50 or more high producing hens.

Educational "milk-for-health" campaigns are coöperatively carried on by the Department of Agriculture, the State extension services and committees of local people, including dairymen and milk distributors, schools, women's organizations, business men and others. These

campaigns have greatly increased the consumption of milk and decreased coffee drinking by children and such improvements have proved permanent.

Child training and parental education is being carried on in several states by child training specialists, and the number is likely to increase. This work is being most eagerly taken up by rural parents, who are perplexed with many of the problems outlined in previous papers.

The emblem of the Boys' and Girls' 4-H Clubs fostered by the Extension Service is the 4-leaf clover, representing head, heart, hands and health. In addition to the special work with the girls on home-making subjects such as food selection and preparation, canning, clothing and home improvement, our so-called "Growth Work" with members of Boys' and Girls' 4-H Clubs is helping them to make themselves their own best exhibits from the standpoint of physical fitness. We shall discuss this later.

Leadership in school lunch activities has always been a major interest in extension work. I may say that when I went into extension work fourteen years ago, one of the things we taught, when we went out to the farmers' institutes was the necessity of providing something warm for the children at noon, so that they would eat the rest of their luncheons. Hot lunch clubs for boys and girls, and support of the school lunch on the part of school patrons is still taken up, and here we see the work of the school supplemented by this work done directly with the homes. We may compare this new régime with a school lunch scene in the old days, with the teacher going home to a hot meal, and the children gobbling their cold lunch on the doorstep preparatory to rushing off to play.

The next picture is that of a mother, a member of a home demonstration group, who has prepared some hot soup at home and has brought it to school. She is putting it into the children's cups to eat with their cold lunches.

We have many pictures of such activities carried on by parents, or groups of parents, in coöperation with the schools. We are looking forward to the day when the schools all over the country will be equipped to carry on the school lunch program, and make it permanent. The difficulty seems to be that as the teacher changes, the attitude toward the school lunch in the school may change, and it seems neces-



sary to have a permanent joint committee of teachers and parents who will foster the handling of the school lunch on an adequate scale and keep it up to nutritional and sanitary standards. Fortunately this is rapidly becoming a function of the parent-teachers associations.

*Guidance in health education.* The home demonstration agent has usually had teaching experience as well as home economics training. She often guides and assists the rural teachers in her county to put over health education in their schools, since she has found that it is much more effective to work with both adults and children in the same community at the same time than to work with either group separately. In several States, by agreement with the health and school authorities, the State nutrition specialist and home demonstration agents have taken the lead in county or State-wide nutrition and health programs, demonstrating the value of health education in schools, training the teachers, or preparing groups of home-makers to assist the teachers or to be responsible entirely for this work in the schools. The agent herself, who has so many other duties in the county is not encouraged to work permanently in the schools in this manner.

*Hygiene of clothing.* Extension agents are working with 4-H Club members on the care of the feet, approved shoes, and the selection of other garments for health. Work is also done with mothers on hygiene of clothing for preschool and school children. "Sunbathing suits" are our latest problem.

Among outstanding methods in use by the Extension Service are the following:

*County-wide training groups for local leaders, conducted by the State nutrition specialist.* Usually two of the best qualified women are selected from each organized group and meet with leaders from other communities at some central point in the county to receive this leadership training. Guided by carefully drawn subject matter outlines and equipped with illustrative material, these women then present the same work to their community groups, with or without the help of the home demonstration agent. The use of such trained local leaders is arousing an interest in local problems of child health, sharpening the observation and developing latent powers of leadership in numbers of women in the open country. These women and their groups work

first with their own children and later with the children of the community, either in other homes, or assembled in the schools and 4-H clubs.

*Building up the mental picture of the optimal child.* We are coming to believe that training in the points of a physically fit child is just as possible to give and just as important, as the training which the extension service is now giving in standards for farm and home products. We are therefore just beginning to use demonstrations of "Points to Work for in Children," based on the outward and visible signs of good growth, good nutrition and good posture common to all optimally developed children. The points we are using in this demonstration are based on research in child development, nutrition and pediatrics, and were selected with the help of the American Child Health Association, which has coöperated by searching the literature and by giving training to regional groups of State nutrition specialists in standards of nutrition, growth and posture. A forthcoming publication\* of the Association, discussing and illustrating such outward signs of good growth, nutrition and posture as may be grasped by the lay person is in preparation at the request of the Extension Service, which hopes to use it with groups of home makers and members of 4-H Clubs.

In giving the demonstration on "Points to Work for in Children," pictures are used to show good and poor nutrition, and then actual children are taken as living models. These children may be small girls, but since we wish to have the torso bare, we usually prefer boys between the ages of seven and twelve years, carefully selected to illustrate as many of the points as possible. We use boys in running pants, and girls in bloomers or bathing suits. Often the county nurse helps make the selection. Before the children are used, they are taken to the county health officer or the local physician for a careful physical examination. This demonstration has served its purpose effectively, in that it has helped parents and teachers to look at children with a new discrimination and has aroused a desire to learn more about the food and health habits that contribute toward bringing the child

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\* Now ready for distribution, *Signs of Health in Childhood—A Picture of the Optimal Child*, by Hugh Chaplin, M.D., and Edward A. Strécker, M.D., American Child Health Association, 370 Seventh Avenue, New York City. Price, 25 cents.

up to the optimal. And the optimal, even though faultily illustrated, is far above the average. Search for children to illustrate this standard emphasizes forcibly the wide prevalence of defective bone growth, defective and irregular teeth, and poor posture, although an increasing number of children show many of the signs of present good nutrition. Sometimes it is necessary to look over several hundred children to find two or three who will serve, together, for the demonstration. This immediately directs attention to the importance of prenatal and infant care and feeding, including adequate protection against rickets through systematic sunbaths and codliver oil. I may say here that the nutritionist, trained to build through more than one generation if need be, for the best possible body, frequently has a higher standard of positive health than the school nurse or even the school doctor, who have been trained primarily to detect and remedy the defects of a faulty body.

*Growth Work in 4-H Clubs.* There were 586,000 boys and girls between the ages of ten and twenty enrolled in 1926 in the 4-H Clubs organized by the Extension Service, and wore the 4-H emblem. Most of these young people are raising some agricultural product and learning to judge its fine points. Under the slogan "Be Your Own Best Exhibit," the Extension Service is training club members to know the fine points of the well grown human body and to put themselves in the best possible physical condition by good food and health habits and the correction of defects. We believe this will make them more intelligent parents and citizens in the near future.

Club camps and short courses offer excellent opportunities for interesting members and leaders in growth work, and are being increasingly used for this purpose.

County, State and National 4-H health contests have become an important part of this movement, as have team demonstrations illustrating various aspects of feeding, posture and growth. High scoring club members are gradually coming to be used in public demonstrations to illustrate the points of good growth and nutrition.

In all this work, we have had the interested coöperation of the State and county medical authorities, whose assistance cannot be too highly valued.

*Health Contests.* In the health contest, as at present conducted,

children who have had a good start during the prenatal period and early years usually win out, for they have a good foundation on which to build. We need these children as examples of the optimal, but we feel keenly that our contestants should be divided into two groups, one to compete for the greatest improvement, the other for the highest degree of physical perfection. A simple score card in language the child and the parent can understand has been developed for such an improvement contest. We need still more help from the county and state medical authorities if we are to hold a preliminary as well as a final health examination in order to give recognition for improvement during the club year.

Nineteen girls and sixteen boys represented 22 States in the fourth Annual 4-H Health Contest held in Chicago in 1926. This contest was judged by the staff of the Elizabeth McCormick Memorial Fund as it has been in the past. All but one of these representatives was a winner in a State health contest, which means that all had practiced good food habits as outlined in our Food Selection Score Card, and also good health habits and had had all defects corrected. Practically every State winner had carried on sustained training to raise his score, and many told stories of a year or more of intelligent work to put themselves in condition for State and National contests. In 1926 the girl entrants outnumbered and outscored the boys, and had done more work to fit themselves for the contest.

The information these young people have acquired and their attitude toward the necessity for physical fitness is most encouraging, and back in their home clubs they have materially helped to spread this point of view.

Growth work is increasing, but increasing slowly because the contacts of extension workers with the club members are limited, compared with the daily contacts of the school, and the men club leaders have not had as much training along this line as the home demonstration agents.

*Looking Toward the Future.* Our own greatest problem seems to be to consolidate the ground we have gained and make it the basis for a permanent advance in the attitudes, the practices and the actual physical condition of rural people. As leaders, we are orienting our own thinking around the central idea of "Food for Health," supported by three basic standards: the food selection standard (which is em-

bodied in our food selection score card), the standard for the farm food supply and the standard for good growth, good nutrition and posture. These three standards coördinate the many branches of the foods and nutrition project.

*Family and Community Nutrition Standards.* From these three we have worked out two others, which serve as the goals, the measure of achievement and a large part of the subject matter of our foods and nutrition project. The first is the so-called Family Nutrition Standard, which combines the following elements: the physical condition of the members, their food habits, the farm food supply, food preparation, habit training for children, and use of the family meal time as a constructive element in the family life. The second is the so-called Community Nutrition Standard, which brings together in terms of community activities the points included in our Family Nutrition Standard. This community standard includes many goals toward which health and lay organizations are working, such as: bringing preschool children to school in optimal condition, keeping children in good condition throughout the school period, periodic physical examinations and follow-up in the schools, school lunch on a permanent basis, health education as a part of the school routine, mother and child clinics, and adequate dental service. It includes also some points which are perhaps not so generally included in the thinking of public health people, such as: home economics instruction in the schools, training in standards of nutrition and growth for both children and adults, boys' and girls' clubs, including growth work for all members, an adequate as well as a sanitary supply of food on local markets, and balanced meals for community gatherings.

The first point in our community nutrition standard seems to me significant. It reads: "A long-time community nutrition and health program in which all interested agencies are effectively coöperating." We do not hesitate to put the most difficult problem right at the top.

#### A COÖPERATIVE COMMUNITY NUTRITION PROGRAM NEEDED

The number of extension workers is increasing slowly, it is true, but steadily; workers in the field of public health are increasing rapidly; more teachers are coöperating effectively in the health program;

more state and national organizations of professional and lay people are focusing their interest on health, particularly for the child. We are all working toward much the same end. Based on our training and our experience, we have different contributions to make, though since the same research sources are open to all, it is inevitable that as our vision broadens to take in the whole child the points are increasing where we hold much information in common. For example, the field of normal nutrition is no longer the playground of the biological chemist and the home economist alone. Physicians and nurses have recently discovered that "food makes a difference" and that many of the ills they have been trained to detect and cure can be minimized at their source through day by day building with adequate food, rest and sunshine for the child and its mother.

We are all working for dear life, because rightly or wrongly we feel we are helping to make the world go round. Probably this is why we state our own problems and lay our own plans, and only when we need help do we try to persuade some other organization to work with us. When this happens, we are amazed at the resources our neighbor can bring to bear on our own problem, which turns out to be his problem too.

Will the time not come, and soon, when it is the rule rather than the exception for the representatives of professional and lay organizations to bring to a common council table the problems they see, list those that are of common interest, decide on the most important in the logical order of attack, and make a coöperative plan to function over a period of years? One of our first acts will be to pool and analyze our information as to existing conditions, and this will show many gaps which need to be filled in with statistics in such form that they can be collated. When the facts are before us, they can be hammered into the minds of the general public more effectively by a variety of agencies than by a few. We shall use our limited resources better, and work more happily as well as more effectively, if we work together on a common program, wherever our fields meet and merge.

To bring to such a coöperative plan, the Extension Service has a personnel trained in nutrition, in home economics, in agriculture and in rural leadership. These workers have a fund of experience gained through intimate contact with rural people, for they have access to the

rural home and work with key men and women in the rural districts probably more closely than any other agency. The home demonstration agent and the county agent have behind them the resources of the State specialists, the State experiment stations, the State agricultural colleges and the Federal Department of Agriculture. In their counties they reach directly from 100 to 500 children in the 4-H clubs, who will one day be leading rural citizens.

We of the Extension Service are receiving splendid coöperation from all health agencies, and we believe in doing our level best to return that coöperation. We feel that the time for a coöperative nutrition and health program in the rural districts is very close at hand, and to that program we pledge our best support.

*Doctor Cumming:* I am going to ask Doctor Chesley, of Minnesota, to open the discussion on the trends in State child health work.

## TRENDS IN STATE CHILD HYGIENE WORK IN MINNESOTA

A. J. CHESLEY, M.D.

*Secretary and Executive Officer, Department of Health, Minnesota*

LOOKING at the child health program from the standpoint of a State Health Officer, I want to say first that it is only a part of the public health program of a State. It is an important part, but it is not the entire program. In undertaking this work, we have to consider the sort of organization provided by the State law, the local bodies through which health work is done, the appropriations made for carrying out the work by the State, the counties and municipalities. That is, in fact, the simplest part of the program. We know pretty well some of the things which need to be done. We can find a way in almost any State to do some of these things, if we have the money and are not limited by legislation so that we cannot use the money in the right way to get the desired results.

The best feature of the child health program is that it is essentially of an educational nature. Although the best part of any health program is education, health officers have many other duties which unfortunately take precedence over the educational phases of their work.

Because the voluntary agencies are not hampered in this way, and usually have ample appropriations, we look to them to make the advances in health education and we look also for Federal aid to assist the States and the counties in demonstrating to the people that they are making a good investment when they appropriate funds to carry on maternity and infancy work.

As to this work I will say that in Minnesota we are operating to-day under a law passed in 1866. To be sure it does not have the title it had in 1866, but its content is the same. We have county boards of health, but they have practically no child health duties. They have absolutely no appropriations for this work and the only way we can operate on a county basis (which has been demonstrated to be the proper administrative unit, through the work of Doctor Lumsden of the United States Public Health Service and the work of the International Health Board of the Rockefeller Foundation under Doctor Ferrell), is to get around the law.

Every township—and in the west the townships are six miles square—has its board of supervisors, who are elected annually, and who govern the township and constitute the board of health. The law says that they shall employ a physician as medical health officer, but they do not do it. We have about 2,000 townships in Minnesota, and of those, less than 200 are unorganized, and the unorganized townships alone fall under the county boards of health. It is therefore necessary to have each town board name the county health officer as Health Officer for the township in order to give him countywide jurisdiction.

Another difficulty in the Minnesota work arises in relation to the municipalities. Cities are required by law to have medical health officers. Villages may or may not have them. If they do not, they fall under the jurisdiction of the rural township boards. Our first problem then is to organize for work on a county basis.

As to the public health nurses, a Minnesota law permits the county, the township, the city or the village to employ them, and we have to work up the sentiment demanding that they be employed. After that we have to get the appropriation. That accounts for the relatively small number of public health nurses in Minnesota. But we have very good ones. So much for some of the limitations of our program.

We know what we want to do. We know pretty well what means



have been found satisfactory in doing these things. But how were we to go about it? We could not do it on the county basis, which we think is the best one, so we provided for a substitute county organization along this line: first, the State Board of Health appointed a State Advisory Board on Maternity and Infancy, consisting of nine members, three of whom are physicians, one a nurse. Five of the board are women, four men. One of these is the President of the University, who represents all the educational authorities of the State; another is a member of the State Board of Control, Mrs. Blanche LaDu representing Child Welfare (the State Board of Control having jurisdiction over and appointing the county child welfare boards throughout the State). Then we brought in the women who were largely responsible for passing the State law—The Federated Clubs, the League of Women Voters, the Parent-Teachers' Association and the State Organization of Public Health Nursing. We have representatives also from the State Medical Society, from the Northwest Pediatric Society, and from the Minnesota Public Health Association.

The duty of this State Advisory Board is to pass upon the plans of the county administrative boards, and to suggest to the State Board of Health in what manner the State Board shall supplement the work of the county in the program and coöperate with the various agencies, official and volunteer, in carrying out the Maternity and Infancy program.

The county administrative board is composed of five members. First, the county health officer, a physician, is chairman of the board; second, a member of the county board of commissioners. He is interested chiefly in not spending money; third, a physician, selected by the county medical society, and two lay women. These women are chosen by a committee of five, representing five organizations, all practically women's organizations, the County Child Welfare Board, the County Public Health Association, the League of Women Voters, the Federated Women's Clubs and the Parent-Teachers' organization. The duty of the county administrative board is to plan and supervise the Maternity and Infancy health program for the county.

You see that we started by giving representation to the official organizations of the State, educational, social, welfare, on the administrative board, likewise on the county board, and we did not neglect

the medical profession. The first organization in Minnesota to come through 100 per cent was the Minnesota State Medical Association. The Association appointed a representative on each county administrative board. Some counties as yet have not succeeded in getting the two women for their boards in spite of all the agitation by the women's organizations.

The result is that we are in better favor with the State and county medical organizations to-day than we were when we began. The councillors of the Minnesota State Medical Society have recommended to the House of Delegates that the Society, in coöperation with the Division of Child Hygiene of the State Board of Health, undertake a study of maternal deaths, according to the plan of the Consulting Obstetrical Committee of the United States Children's Bureau. In 1923 a study of the midwife situation was made at the request of the State Board of Medical Examiners, who license midwives in Minnesota.

The elements of the maternal and infancy program are quite similar in the different States. The only feature somewhat different in the case of Minnesota is the Indian nursing service. You are all aware of the fact that it was Doctor Crumbine's idea, and it was through his initiative, and the collaboration of Miss Abbott, that we obtained the money to start this service. The Indian Bureau gave very good cooperation, and the nurses have had still better cooperation since the medical service of the Indian Bureau has come under Doctor Guthrie of the United States Public Health Service.

We are cutting down on clinics. Next year we are not going to put on clinics of any kind, except when the county medical society specifically asks for them. We have held prenatal clinics for whites and Indians, and baby clinics almost exclusively for the Indians. We have carefully avoided in our program all measures which have the semblance of the beginnings of State Medicine. We have not antagonized the medical profession. On the other hand, we have interested them to such an extent that we are now prepared to go before the State Medical Association with a plan for decentralization of our work, making the county administrative boards assume their proper responsibilities, the medical representatives on those boards to take the initiative in the program, and that, we believe, will put the work on a sound basis for the future. As soon as we get more public health nurses to work with

these county administrative boards and other agencies, the welfare boards, the school and the volunteer agencies will have sufficient public support to allow the medical and nursing phases to assume their proper importance. With the development of county units and in their cooperation with the extension division of the University and with the State Department of Education, we shall have a real means of making the child health program a success in every district in the State of Minnesota.

The big cities can take care of themselves. We have done nothing in Minneapolis, St. Paul and Duluth. Our work has been wholly outside of those cities. It is in the rural districts that the most work is needed.

Nothing constructive can be done in a child health program which does not aid in every other phase of a State program for health. In that respect it is like tuberculosis work. We have the most cordial support of the volunteer agencies, and particularly of the women's clubs. The success of our program has been due about 95 per cent to the interest of the women.

The trend of State maternity and infancy programs is towards decentralization of administrative and field work, avoidance of activities interpreted as "State medicine," enlistment of organized medical and nursing forces as supporters and doers of the work, with increasing emphasis on the responsibility of the women's clubs for sustaining public sentiment and for securing sufficient funds from State, county and municipal sources to conduct the work as a permanent part of the regular community public health program.

*Doctor Cumming:* I am going next to ask Doctor Schweitzer to speak.

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## CHILD HYGIENE PROGRESS IN INDIANA

ADA E. SCHWEITZER, M.D.,

*Director, Division of Infant and Child Hygiene, Indiana State Board of Health*

THE health of children has always been the concern of parents. In the days of the earlier settler, necessity bred self-reliance. The family raised or procured from the lakes and forests its food, clothing, and shelter. The family was a community unit. It made many of its own laws and enforced them except in emergencies. It provided for its own education, its own medical and social service, its religious and recreational facilities. Each family was its own baby health center and vocational guidance bureau.

Other settlers came and kept coming. Adjustments involving the rights of others were necessary. A quarrel might involve not only your John and your Daniel, but your John and Bascomb's William, and finally your John and the neighborhood gang. Public schools were built. The teacher replaced the governess. The consolidated school replaced the little red school house.

The horseback riding physician who carried his drug store in saddlebags was metamorphosed into the family physician, the counsellor and guide in the community health matters. The modern busy doctor often sees as many patients in "office hours" as his more remote predecessor saw in a week. His hurried auto visits, his line of waiting patients, are likely to impose limitations on his familiarity with family atmosphere or personal idiosyncrasies on which may depend a complete diagnosis.

With the growth of communities, sanitary problems arose: The protection of the clean from the unclean; of the susceptible from the disease carrier; whole communities from other communities; and, with increasing facility of communication, cities, states, and nations from other cities, states, and nations. The whole world comes to us laden with gifts and with diseases. The east and the west, the north and the south, salute each other on their journeyings through the cross-roads of America.

The ever increasing complexity of merely living demands newer methods of defense. The earlier menace to the child life of the savage,

of the lurking wolf, of the soaring eagle, could be met with the sure aim of the settler's gun; but the protection of the twentieth century from malnutrition, from infection, and from the hurry and stress of modern life requires the best that science can offer. A review of the public health laws shows that child protection is the underlying motive.

The Indiana law of 1891 providing for a State Board of Health requires that the Secretary be a licensed physician, informed in hygiene and sanitation, who shall collect information respecting vital statistics, disease, and so forth, and shall enforce health laws and health rules. He is given power to regulate conduct and to protect the people from the spread of infections and to supervise registration of births, deaths, and marriages. This bookkeeping of humanity reveals location and causes of sickness and death and so aids in combating them.

The ordinary person is not a criminal who deliberately decapitates or stabs his victim, yet, with all our boasted civilization, we must have laws requiring quarantine of disease infested families or localities or the isolation of persons infected. The quarantine law of 1903 forbade the attendance at school of children having communicable disease, or travel of infected persons in public conveyances.

In 1911, the medical school inspection law required medical inspection in the presence of an epidemic and provided inspection and health tests at other times at the school board's discretion.

In 1913, detailed instructions were given in the construction of sanitary school houses as to site, type of building, lighting and seating, water supply, heating, ventilation, waste disposal, cleanliness, and so forth. A law of the same year required the reporting of precautions against ophthalmia neonatorum and physicians' fees might be withheld for failure to comply.

The protection of children and adults bitten by rabid animals was undertaken in 1911. Free diphtheria antitoxin for indigent persons was provided for the same year.

In 1913, rat infested property was declared a public nuisance. Danger to children from attacks and infections they may carry has been partly eliminated. A 1913 law provided the questionable potability of any public water supply might be brought before the State Board of Health for investigation. Measures designed to protect against tuberculosis were passed in 1913 and specified report in case

of disease, disinfection, and renting of houses formerly occupied by tuberculous persons was required. Later county tuberculosis hospitals were authorized. (Such hospitals at Indianapolis, Terre Haute, Gary, South Bend, Fort Wayne, Anderson, and Evansville serve the adjacent territory. There is a State sanitarium at Rockville. In all of these, there is special provision for children.)

The importance of proper environment and housing was emphasized by the housing law of 1917. In 1919, the appeal from condemnation of school buildings by the State Board of Health was provided.

Protection against several diseases affecting persons entering institutions was the purpose of a 1921 law. In that year constructive health legislation in the second, third, and fourth class cities authorized for payment from city treasury for public health nursing service and the establishment of public playgrounds, baths, and comfort stations.

The Pure Food and Drug Law in force for twenty years has resulted in greatly improving the quality of both foods and drugs by requiring standard production and manufacturing, handling, and labeling.

In 1925, the latest knowledge of sanitary milk production was embodied in a law. In 1919, a renovated butter law became effective, and a model bakery law which included regulation of housing and food handlers. Provision was made for the analysis of public drinking water.

In 1919, the legislature made an appropriation of \$10,000 for the Child Hygiene Division work and \$10,000 for tuberculosis work. The rapid development of the child hygiene activities led to the appropriation of an additional \$5,000 for the second year, and of \$20,000 each for the third and fourth years.

In July, 1922, the Governor of Indiana accepted Federal aid available under the Maternity and Infancy Law. With combined State and Federal funds since that time (approximately \$20,000 State matched with \$20,000 Federal and \$5,000 Federal unmatched each year) the Child Hygiene Division of the State Board of Health has undertaken:

To give instruction and practical demonstrations in prenatal, maternity, infant, and preschool care in five period courses of study in county-wide classes.

To meet requests for lectures, exhibits, motion pictures, and assistance in carrying on special projects.

To assist communities in coördinating existing activities and to stimulate needed new ones.

To carry on periodically special health educational activities designed to reach large numbers of persons.

To demonstrate in all parts of the State the value of periodic examinations and health supervision of children, beginning in babyhood.

To train and develop leaders in child health work throughout the State who will "carry on."

To stimulate the formation of Child Health Boards composed of delegates from official health, scientific, municipal, and lay organizations for planning and conducting of Child Health activities.

Activities of the State Child Hygiene Staff are summarized as follows:

The holding of Baby Health Conferences in practically every township in every Indiana county, where 47,000 children have been examined and parents have been advised as to care.

(This does not include examinations by arrangement by Public Health Nurses, schools, and local baby centers which total several hundred thousand, where the State Child Hygiene Division has given some form of assistance, as personal direction, loan of exhibits, and furnishing of record forms and usually of health pamphlets.)

Course of study in prenatal, maternity, infant, preschool health protection (three lectures by physician and two demonstrations by the nurse), which has enrolled more than 40,000 women in 4,700 classes. The last lecture illustrated by films. The Gift of Life, Well Born, and Diphtheria Prevention, and Tommy Tucker's Tooth is given to both men and women with such children as they care to bring. The pictures review the course of study, emphasizing preparation for parenthood.

The presentation of this course in 18 Indiana colleges to over 3,000 young women.

Assistance given in planning health programs for clubs of all kinds—Parent Teacher Associations, American Association of University Women, Tri Kappas, League of Women Voters, and others.

Health talks by Child Hygiene Director and staff to audiences of 287,000.

Health pamphlets distributed numbering 680,000.

Results taken from our correspondence show:

More expectant mothers seek doctor's advice early.

Mother death rate lower—now fourth from lowest (1924) in the United States.

More living healthy mothers to care for well babies.

Mothers now know correct feeding and care. Less cholera infantum.

More children starting to school in good health.

Infant death rate, five year averages ending 1914, 96; 1919, 83; 1924, 71; year of 1925, 67; 1926, 71.

Mother death rates for same periods: 1914, 7.78; 1919, 7.04; 1924, 6.2; 1925, 5.7.

Special annual activities designed to reach State-wide groups in large numbers are:

Annual observance of May Day as Child Health Day, not only a day of joy for healthy children, but also the goal and beginning of each year's activities.

Child Health Week as a part of the Winona Lake Chautauqua program. This year, exhibits, lectures, demonstrations, and baby conferences will emphasize safety first in maternity and infancy.

Assistance by staff members at Chautauquas and fairs, teachers' institutes, and state and district club meetings.

Better Babies activities at the Indiana State Fair.

For the last, the State Board of Agriculture furnishes a demonstration building with equipment for baby conferences, day nursery, exhibits, baby bath, diet kitchen, toilets, and so forth, with a playground adjoining.

This year, a second building is being constructed similar to the first, brick elevation three feet, window elevation six feet, with a ten-foot walk around the building.

Last year, 12,000 babies were examined and about 50,000 persons saw the demonstrations State Fair week. The Indianapolis *News* carries publicity articles on child health and pages of baby pictures for three months, July, August, and September.

In 1927, the Indiana legislature provided for the acceptance of the amendment to the Maternity and Infancy Act by authorizing the expenditure of \$25,000 of the State Board of Health appropriation. This sum was to be matched by a like Federal appropriation.

The interest in child health is manifested by lay organizations in definite programs. In Indiana a survey of laws and of home and community conditions affecting children was made by the Federation of Clubs last year in Cass County. This year several counties are making surveys which will reveal their status in regard to child health.

More than a hundred Parent-Teacher Association groups have registered for the summer round-up of children and many groups not affiliated with State and National organizations have undertaken the task of health preparation for school.

The preschool study groups are including in their activities the



sponsoring of examination of infants and preschool children. The American Association of University Women has preschool study and favors periodic examinations.

The Tri Kappas and other sororities arrange for the summer health supervision of babies by doctors and nurses.

The health committees of the Legion Auxiliary are giving financial and personal assistance in local and State health projects. The Women's Christian Temperance Union is helping distribute needed health pamphlets to expectant mothers and is giving them personal help and cheer.

The League of Women Voters with other organizations is trying to establish legal safeguards to child health, and is working on local health projects. The Photoplay Indorsers approve health films selected by the Child Hygiene Division.

The Rotary, Kiwanis, Elks, Service, and other men's clubs are assisting and are financing corrections and health improvements needed by children in their communities.

Organizations of farmers and farmers' wives are studying all kinds of health promotion and are transforming rural communities. Four-H Clubs have health projects. One thousand winners in projects were sent to the annual Round-up at Purdue University in May. The Child Hygiene Division Director examined the girls in the health contest.

Boy Scouts, Girl Scouts, Girl Reserves, Hi-Y Boys, Camp Fire Girls, churches, and Sunday schools plan programs. The Indianapolis Chamber of Commerce prints child health programs and approves them.

Many homes are becoming health centers.

The higher educational institutions give instruction in health standards, provide physical examination, and advice for students. Purdue and the Indiana Universities have practice houses. In the former, baby care is taught and some baby has, for a time at least, expert care. Extension courses in home making, in the care and training of children, in parent-teacher training are offered to parents, and courses in health education to teachers.

In three counties where the writer conducted teachers' classes in health education as a part of a University Extension project, the health projects were planned to reach in a practical way the school room, the home, the child, and the community. The schools themselves

are authorized to provide medical inspection which is compulsory in the case of epidemics.

Public health nurses and teachers are uniting in health supervision and habit training of children. Children are interested in health attainment as a means to some desired end.

Officially the National and State Medical and Dental organizations are conducting educational campaigns through lectures and press articles. They are medical and dental advisors in measures planned by Child Health Boards.

Municipal and lay organizations are planning health activities.

The remark of one prominent physician, "More progress has been made in child health work in the last five years than in twenty former years" applies to the nation as well as to Indiana. May we guide wisely the tremendous interest we have helped to create so that another five years may bring us nearer the ideal embodied in the Child's Bill of Rights formulated by our Association President, Herbert Hoover.

*Doctor Cumming:* Commissioner Meredith will now address us.

## CHANGING ATTITUDE OF SCHOOLS WITH REGARD TO HEALTH

A. B. MEREDITH,

*Commissioner, Department of Education, Connecticut*

THE changing attitude of the school with respect to health parallels the changing attitude of the school toward general education. For many years, educators interpreted the principle of self-development in terms relating solely to intellectual growth. The school was considered to have discharged its function if the child was trained to use his mind in certain definitely prescribed fields. Physical well-being was regarded as a dispensation of Providence or the gift of a fortunate inheritance.

Most of the early health teaching grew out of the extensive efforts of the temperance societies and anti-saloon workers to have the evil effects of alcohol and of narcotics taught to school children. Much legislation was enacted to that end. Naturally, considering the end in view, this health teaching took the form of physiology and anatomy

and a few related rules of hygiene. Just as general education was concerned chiefly with informational content, physiology was confined to memorizing and reciting the names and locations of bones and organs and to learning the dire physiological results that would follow if a person became addicted to alcohol. In so far as a child learned the prescribed facts and could recite or write the answers, he was deemed to be educated. The immediate aim of both teacher and pupil was knowledge that could be measured by the current system of examinations and grading.

The next step was the inception of procedures to prevent contagion among children at school. Medical inspection became the vogue. School physicians and nurses were added to the school staff. Regulations aiming to prevent the spread of communicable disease were established. The principles of hygiene were more energetically and intelligently applied to the construction and maintenance of school buildings and equipment. This movement was coincident with the beginning of the present great public health era that started with the ascendancy of preventive medicine.

To-day, however, prevention and the teaching of physiology are but phases of a larger program. The school not only aims to keep the well child well, but it goes a step farther and seeks to establish measures that will bring the child who is low physically up to a standard possible for him. Thus promotive measures have been added. In health teaching, the emphasis has shifted from the acquisition of factual information to the child himself. The idea now is to translate health into the actual life of the child in terms of normal activities. In other words, we are now building a health curriculum out of the activities that go to make up the child's life both at school and outside of school. Our methods seek to guide growing youth in the performance of those activities, on the principle that healthful living is acquired by conscious efforts to live healthfully. Our goal is a boy or girl trained in all aspects of healthful behavior—namely, physical, mental, emotional and social—so that he will become a healthy, happy and efficient member of society. Instead of being concerned, as in the past, with mental development alone we now recognize the child's inherent right to the opportunity for normal growth and as effective adjustment to his environment as possible.

### *Position of Schools in Health Work*

Ideally, health education in all its phases is a function of the home, but not all parents are informed in health matters nor are many capable of training and instructing children properly. Thus, the school, an accredited organization for training children, is in the strategic position to do constructive health work. In the school, the machinery of education is already established and in operation. A logical avenue of approach is furnished. Moreover, health training is so intimately related to mental, moral and social development and so fundamentally an educational problem that separate treatment is neither possible nor feasible.

### *What the Public Schools Are Doing*

Notwithstanding the fact that health activities in the school vary widely in scope and value, there is a general trend to the movement that is fairly uniform. Naturally some sections of the country are more advanced than others in certain phases of health education, and there are some degrees of variation due to sectional differences, which reflect themselves in the relations of control and influence of the State Departments of Education, but in taking the health programs by and large, the major divisions are found in most state programs.

The following may serve to indicate some of the activities of the State of Connecticut, through its State Board of Education.

#### *A. Preparing the Child for School*

Although the preschool period is the most difficult to reach, it is the field in which many of the more recent developments of health education have taken place. Started by public health nurses, the work with preschool children has so demonstrated its value that there is a growing tendency on the part of school health workers to include it in the school program. Foremost among these values are, first, the correction of a large percentage of physical defects before the child enters school, thereby insuring him a better start than he might otherwise have; second, the attendance rate for the kindergarten and first grade is improved by reason of having certain physical causes of absence removed before the child becomes a pupil; and, third, the nurse by her contact with the home is able to interest the mother in

working for health-habit formation on the part of the child at an earlier and more desirable age than would be the case if all training were left for the school to do.

The popular method of reaching the preschool child is through the "Summer Round-Up." The promotion of this Round-Up has been one of the particular activities of the National Congress of Parents and Teachers, and enlists the interests of town Parent-Teacher Association. By this plan, all children who are to enter school in the fall are examined, usually by a physician but occasionally by a nurse. The findings are explained to the parents who are urged to have the defects corrected before the opening of school. The results from the "Round-Up" have been most encouraging. An increasing number of towns are adopting the plan, either through the school department or the public health nursing association, and it is a feature of the State school health program for Connecticut.

### *B. Teacher Training*

Without question, the normal school is the key position in the development of the school health program. Teachers must have first of all, the sympathetic attitude toward health that will enable them to make it a vital and absorbing subject to children. Without it, there is little chance of the teacher's accepting wholeheartedly the responsibility which is hers for the healthfulness of her school and the healthful behavior of her pupils.

In Connecticut normal schools, the first step in the training of teachers relates to the health of the prospective teacher and takes place before or at matriculation.

We believe that good health is the fundamental personal qualification of a teacher, or, to state it differently, that the good teacher is first of all a healthy teacher. The basic characteristics of a good teacher most frequently stated are, a wholesome personality, cheerfulness, patience, fair-mindedness, enthusiasm. All of these are conditioned by physical health.

Our prospective students are, therefore, required to meet certain definite health standards. Upon acceptance of her academic credentials, each applicant is required to undergo a health examination given by a medical examiner in the employ of the State Board of Education.

There are three possible outcomes. She may be accepted without condition, accepted on condition or rejected. The first and last are self-explanatory. To be accepted on condition means that the matriculant agrees to have the physical defect or condition of ill-health found at the examination corrected within seven months after matriculation, or, in case of failure to do so, to accept dismissal from the school.

Thus, we attempt to insure at the start a healthy body of prospective teachers. More important than the preliminary examination, however, is the follow-up conducted by the instructors in health and physical education. Each report is gone over carefully and, as soon as possible after the opening of school, each student is called into conference for a discussion of personal health matters. Advice is given according to the need manifested either by the examination record or by the student's personal story. Certain cases are followed closely during the probation period in an effort to assist them in overcoming their conditions.

The following figures will give some indication of conditions:

	1924	1925
Accepted. . . . .	482	597
Conditioned. . . . .	167	245
Rejected. . . . .	14	15

The health training and instruction program of the normal school includes all phases of the public school health program as outlined for the elementary teachers of the State. Among the most important topics are:

- School hygiene and sanitation.
- Prevention of communicable disease.
- Signs and symptoms of the common contagious diseases of childhood.
- Signs and symptoms of the common physical defects.
- Nutrition, including the school lunch.
- Physical training—formal and recreating.
- Conservation of vision.
- Personal and community hygiene.
- Mental hygiene.
- Principles and methods in health training and instruction.
- Tests and measurements in health education.
- Personal and group safety.
- Principles and methods in safety training and instruction.

As a part of the required practice teaching in the training schools,

the student-teacher is expected to apply the principles of health to the school program and to teach health in compliance with the State law which requires two half hours each week for health education. Her work is observed and rated in the same manner as it is in the other subjects.

### *C. School Hygiene and Sanitation*

The physical environment of the child at school is ranked high in relative importance in the new school health program. In fact, school building sanitation has always been one lap ahead of the other health prerequisites. The best in the way of ventilation, heating, lighting, etc., are embodied in the new building construction and recommended in printed bulletins for the school committees. The consolidated rural school makes many of these desirable features possible in places where, otherwise, the old order would be practically unalterable. Drinking water is tested annually and the source inspected. Sewage is becoming negligible as a cause of disease transmission. The public seems more intelligent with regard to these last two items of the school health program than is true of some of the less obvious features. The Board has an inspector in the field at all times, and also has a consulting architect whose services are free to towns.

Of greater importance than the physical changes in the building itself, is a developing health consciousness on the part of the teacher, and, to some extent, the janitor. Buildings are cleaner and neater. More attention is paid to temperature regulation and ventilation. Lighting conditions are considered when work assignments are being made. In short, teachers seem to realize the health significance of all environmental conditions more fully than ever before. In practice, they are applying their knowledge intelligently and conscientiously.

### *D. Prevention and Control of Communicable Disease*

The school health program provides for preventive measures in the schoolroom under the supervision of the teacher. These refer for the most part to the simple rules of personal hygiene, such as keeping the fingers and objects out of the mouth, covering the mouth and nose with a handkerchief when coughing or sneezing, using individual drinking cups, combs, towels and working utensils, etc. Administra-

tively, the teacher is supposed to exclude from school pupils showing any departure from the normal, or to readmit those who have been absent because of illness only upon presentation of a certificate from the health officer. Regulations governing exclusion and readmittance vary with regard to specific conditions but, in general, they are as stated.

The common drinking cup and the roller towel have been abolished. The possibility of disease transmission by other articles is recognized and measures prohibiting the exchange of articles of clothing, or the use of a sick child's books, etc., are in operation.

In many school systems, the nurse is the keynote in prevention. At the morning health inspection, pupils found to have any sign or symptom of disease are isolated until the nurse makes her routine visit, or they are sent to the nurse's office immediately. Methods vary widely but the underlying principle of prevention determines the course of action in all.

In 116 towns school nursing service is given under the direction and control of school authorities. Other towns have this service under other auspices. In all, however, 89.2 per cent of the towns have school nursing service. This work began nearly ten years ago and now has a strong hold on the public. In towns receiving State aid the school nurse is rated as a teacher and varying percentages from 75 to 10 per cent of her salary are paid from State grants.

Institutes of three weeks duration are held at the Summer Normal School and in connection with each of the four State normal schools extension courses of thirty sessions have been largely attended by both school and public health nurses.

Under preventive measures, mention should be made of vaccination and toxin-antitoxin immunization. Vaccination is usually a matter for local adoption but regardless of legal regulation, the school health officials are doing all in their power to influence parents in favor of vaccination, and rightly. No one health activity has won favor so rapidly as toxin-antitoxin immunization to diphtheria. Like vaccination it is an activity for the parent's consent, but from experience to date, especially after the first year of trial, there seems to be little objection. It has been added to the health program of the beginning pupil for it is desirable to set up immunity as early in life as possible.



For that same reason immunization has an important place in the health program of the preschool child and when this program finally becomes universal the school will be less concerned than at present.

### *E. The Health Examination*

The health examination is the outcome of the old medical inspection although the use of the term and the practice of medical inspection have not been wholly discarded by any means. Medical inspection was a hasty "going over" of the child in search of early indications of disease and signs of physical defects. It was superficial and, hence, inefficient. But educators and school health workers, realizing the potential worth of the health examination, have gradually given it a more prominent place in the health program. It is still in the process of development as it very likely will be for many years to come. The general trend, however, is evident and most encouraging. The Connecticut statutes require the employment of a school physician in all towns with 10,000 population, and the law is obeyed.

The majority of school systems, including the rural schools, require some sort of a health examination, most of them annually. There seems to be a tendency in favor of a change whereby a pupil will be given a thorough examination upon entering school, again in the fourth grade, and finally in the sixth or seventh grade. Under this plan, it is argued that the present inadequate health personnel will have time to give a more thorough examination than is the case when all pupils are examined annually. From a study of statistical findings, it seems true there is not sufficient change in the physical condition of children from year to year to warrant the annual examination. Children exhibiting marked deviation from the normal at the first examination, or whose parents fail to have corrections made, are reexamined the second year and annually if the need still exists. Reports from places where this plan is in operation are optimistic and seem to point toward general adoption.

In towns where no school physician is employed the examination is conducted by the school nurse, who follows the usual procedure with the exception of the heart, lung and abdominal examination. Our experience in Connecticut is that the nurse makes a creditable showing in this specialized field.

Along with the growing appreciation of the health examination, it is interesting to note important developments with regard to its scope, conduct, etc. Each year more schools are requiring the removal of clothing, at least to the waist. More time per examination is being allowed. Examining rooms are being provided, especially in new buildings. More parents are accepting the invitation to be present at the examination, although the total number is still very low. The important thing is, parents are exhibiting a greater interest than ever before.

Inspection by teachers as carried on in Virginia and Detroit has not been tried to any extent in Connecticut except for signs of contagion at the beginning of the year, after vacations and at the morning health inspections. The eyesight test and weighing and measuring is done by the teachers in many places in order that they may have first hand knowledge of their children in these respects.

The findings of the health examination are kept on record cards or loose-leaf forms and used by the teacher to correlate health conditions with scholarship and by the nurse for follow-up purposes. Most of the record forms in use are designed to serve for the elementary school career of the pupil.

The work of the nurse with respect to the health examination is chiefly that of follow-up except, of course, where she is responsible for the examination herself. If a physician examines, the nurse is present to assist in preparing the pupils, to take records and to do the routine tests.

The follow-up by the nurse is the vital part of the whole examination procedure. Without it, the examination is of little value, no matter how well done. The usual method is to visit the homes, taking the child's examination report for discussion with the mother. A few school systems attempt to interest the mother in coming to the school for a conference with the nurse, but the response is not encouraging.

The purpose of the follow-up is to interest parents in corrective measures for their children. The notices sent home after the examination are of little value in this respect. It requires the personal contact to get results.

Attempts are being made to have the teacher present at the examination of her class. The purpose is to acquaint her directly by obser-

vation with the health conditions of the individual pupils. She also has a chance to tell the doctor about the child's behavior, health conduct and scholarship. It is believed that the teacher will have a better understanding of her pupils and of their capabilities through this contact.

The practice of having all candidates for athletic teams examined by the school doctor at the beginning of each sport season has been adopted by nearly all high schools.

In Connecticut, we have a state law requiring that all public school pupils be given an eyesight test annually. The parents are informed of the findings. It is, in general, a rough screening process but productive of good results. The number of town systems employing oculists for this special service is slowly increasing. In 1926, 248,394 pupils were examined and 20,259 defects found. This is approximately 8.09 per cent. For the previous year the per cent was 8.25.

We have another law permitting the State Board of Education to prescribe further diagnostic tests, such as hearing, weighing and measuring, and so forth, at discretion.

#### *F. Enlisting the Parent's Coöperation*

The school health program will be wholly successful only as the school succeeds in winning the intelligent and effective coöperation of the parents. It is not the intention of the school in adopting a health program to usurp any prerogative of the home with regard to the care of children. In a word, the school accepts the responsibility of helping the home to determine the physical, mental and personality conditions of children but it places the responsibility for correction or readjustment with the parents.

Consequently the school has little to offer in the way of corrective clinics. It advises the parents to take their children to the family doctor or dentist or to municipal clinics. To this end the work of the physician, nurse, teacher and principal is directed.

#### *G. Special Classes*

A few special classes have sprung up in recent years as a result of the school health program. Noteworthy work is being done in Bridgeport and New Haven. The purpose of each is given in its name. They are:

Health or nutrition class.

Sight conservation class.

Class for crippled children—a recent law requires transportation at public expense from home to school, especially in Hartford and New Haven.

Open air or outdoor class.

They are not numerous as yet but considering their contribution to child health it is safe to say they have a definite place in the public school.

#### H. *Dental Hygiene*

Prophylactic dental clinics represent another phase of the health program exhibiting phenomenal growth in recent years. The prevalence of dental defects and the negligence of parents in this respect have caused the school to take definite steps toward providing children with facilities for dental prophylaxis.

The work of the dental clinic is confined largely to such temporary or emergency measures as cleaning, extraction of temporary teeth, and temporary filling of both first and second sets. An examination is given every child and a report is sent home with the recommendation that the child be taken to the family dentist. The option of having simple work done at the school clinic is granted. For this, the parent's consent in writing is usually required. Small fees are charged to cover the work except in the case of those unable to pay anything and funds are usually available to provide for them.

An interesting development in some states is the traveling clinic for rural schools. Thus far we have failed to get an adequate appropriation to undertake this activity. No doubt, the time is not far distant when facilities will be made available to all rural districts in this manner. There seems to be a special need in the case of the dental program for it is rare to find a practicing dentist outside of the cities and large towns.

#### I. *Physical Activity for Health*

Physical education contributes to the health program through the activities which provide children with wholesome exercise and recreation. In other and more subtle ways it goes far toward conditioning the mental and social health of children. To play actively and happily is a factor of inestimable value in the all-round growth of children.

On the other hand, to keep them inactive for two hours or more at a time, as was the case under the old school regime, is putting a tremendous nervous strain on the child besides depriving his muscles and organs with developmental exercise they require for health growth.

Physical education and health education are not synonymous, nor does one encompass the whole of the other, but they do have certain objectives in common and they do contribute to the growth, development and education of the child. At points where physical education provides exercise, social contacts, happiness, relaxation, etc., it is definitely a health activity.

### *J. Health Teaching*

The early instruction in health took the form of a drill in the facts of physiology and anatomy. It was practically unintelligible to the child and certainly most uninteresting. As for its contribution to health, it was negligible. It was bound to fail, since it did not relate to the child's own activities, his interests and purposes.

Physiology and anatomy are still found in the health curriculum but with a change in emphasis. They are now used only in so far as they render hygiene more intelligible. They are not taught for themselves but for the contribution they make to the child's understanding of the "why and how" of healthful living.

To-day the school is taking the aims, objectives and goals of the children themselves as the basis for health teaching methods. The curriculum is the child's life or the activities which go to make up that life. Health is made real, vital and interesting to the pupil through correlation with the child's daily experiences and with situations from real life. Instead of attainment being measured in terms of stored information, it is now thought of as habits, attitudes, and ideals with regard to health. Knowledge, sufficient in amount to furnish reasons for the observance of habits, is the goal of instruction.

Further change is noticed in this respect. Instead of constantly supervising the child's performance of the health activities and his study of hygiene, we are seeking to provide him with opportunities for self-guidance and self-management in the business of living healthfully. We are consulting his desires and appealing to his emotions and then giving him a health program he wants to follow because of

what he knows will be gained by it. The State Board of Education has provided courses of study for elementary and for high schools, and has an edition prepared especially for the one- and two-room rural schools.

The course in Hygiene provides for nine separate bulletins dealing with such topics as:

Teachers Introduction to the course of study in Health and Safety.

The Course of Study arranged by grades.

A school health program for teachers.

The school lunch.

First Aid.

Eyesight test.

Hearing test.

The specific activities of the Division of Health and Physical Education, with its director, a graduate in medicine, and two assistants, may be summarized thus:

*Publicity.* The courses of study referred to above.

Frequent articles in "Connecticut Schools," a monthly bulletin of the State Board of Education.

Mimeographed material sent upon request or whenever there are significant developments in health education which should be brought to the attention of school authorities.

*Conferences.* These are conducted by the staff and held with local school and health executives. During the last two years 251 such conferences have been held.

*Meetings.* The Teachers Institute and public meetings are the avenues of publicity. For the two years ending last July, 91 institutes were held and in addition 45 addresses on health were given, many before town school committees.

*Visitations.* For the same period 911 schools were visited, 156 of the 169 towns assisted in the interpretation and demonstration of the health and physical education program of the elementary school, 63 with programs for high school, 1,085 demonstrations were given in the classroom, and 253 special conferences were held.

The institutes and sequential courses for school nurses have already been mentioned.

*Surveys.* As time permits careful and thorough-going health surveys have been conducted in many towns, especially prior to putting into operation systematic health service.

*Contests.* For the rural schools especially the winter contests, with groups competing with groups and school with school, have proven very effective. The Annual Field Day has come to be a community day for many towns and the health work of the school placed in the focus of attention.

*Physical Examination for Working Certificates.*

One-half by town	} cost
One-half by State	

The State Board of Education through its Health and Physical Education Division aims to stimulate and encourage local initiative and local interest. It minimizes the notion of control by the state and believes its function to be that of a service rather than an administrative agency.

*Doctor Cumming:* The last speaker on the program will be Doctor Brydon, of Virginia.

## TRENDS IN CHILD HEALTH WORK IN VIRGINIA

MARY E. BRYDON, M.D.,

*Director, Child Welfare Bureau, Virginia State Board of Health*

**I**NSTEAD of going into the subject of what Virginia is now doing as I had written it out in my paper, I should like to give you a demonstration.

Our Child Welfare Bureau of the State Board of Health goes to 33 colleges in Virginia that offer teacher training. I want to turn you into a class in school hygiene or health education in one of these colleges. I want you to forget that you are grown men and women, and have you think of yourself as back yonder at about 21 or 22 years of age. I want to give you in five minutes, or at least in seven, one such lecture as is given to all of the teachers in Virginia before they get their certificates.

I want to say also in looking over what the State Board of Health was doing, I found that I could not limit myself to the activities of the Bureau of Child Welfare. I found that the whole State Board of Health was very busy doing work for child welfare. Just as Doctor Chesley said, the Bureau of Child Welfare is not the whole show; it is only one part of the whole child health program. So now I am going to forget technical terms and give you the principal points we give in this lecture to the teachers.

I want you to remember some things. When you disperse, you student teachers are going all over the United States to teach—and I hope you will all go to the rural districts, because trained teachers are needed in the rural districts—but wherever you go, I especially want you to remember that in every state of the Union, in Hawaii, the Philippine Islands, and Cuba, there is a Board of Health to which you can appeal for the same things I am going to tell you about here—how our State Board of Health meets the needs in Virginia, especially in rural districts. Do not forget that though I may give you the names as I call them in Virginia, you may apply them in other states.

The Virginia State Board of Health consists of seven members, four of them doctors of medicine, one a dentist, and two laymen. The whole work of safeguarding the health of Virginia is in the hands of the State Health Commissioner, who is appointed by the Governor. He carries on the public health work between the annual meetings of the State Board of Health. The Health Commissioner does his work through ten different bureaus. Those bureaus carry on much of their work through local agencies. The International Health Board and the United States Public Health Service coöperate with the Bureau of Sanitation of the state in the disposal of sewerage. The job of the bureau of sanitary engineering is to see that every man, woman and child in the State of Virginia has safe drinking water. When you know that along one highway alone in Virginia, a small one, there are 250 springs, I want to remind you that although you may think you are going to teach in cities, you are certainly going to camp out occasionally, and you will probably spend at least a part of your vacation in the country. Let me urge you to go to communities where there is safe drinking water, or to carry water with you, or boil it, and be sure to boil it always for the babies.



When we get across this life-time job of getting everybody to use sanitary toilets, we are going to cut out flies. When we get these two pieces of work done, we are going to find that we have cut out typhoid fever, we have wiped it off the map, we have cut in half the "summer complaint" of babies. That is a thing I am very much interested in, cutting down that terrible death rate of babies due to insanitary conditions that foster the filth-borne diseases—the diarrheas, dysentery, hookworm and other intestinal parasites carried by flies. There are seven different kinds of intestinal worms in Virginia. Learn all about them. Do not forget. Then learn how to prevent your pupils from having them.

The State Laboratory does four things of help to teachers. It will examine free of charge the water of the home where you live and of the school where you are going to teach, and, incidentally, the water used by all your friends and relatives. It will also examine the sputum of any pupil you may have, or anyone you know about, who may be suspected of having tuberculosis. They will examine the bowel discharges, and look for the eggs of intestinal parasites, and they will examine the throat cultures of the children in your school room, and also your own, when there is an epidemic of diphtheria. There are other things they will do, but I am not going to talk about them at this time.

The Bureau of Vital Statistics collects statistics as to births, deaths, marriages and divorces. They study these things, and will give you most interesting statistics and information that come out in their study.

Our Bureau of Vital Statistics started the midwife educational work in Virginia, and they also are now engaged in preventing blindness in the new-born, by requiring every single baby that is born in Virginia to have a drop of silver nitrate solution dropped into each eye.

The Bureau of Tuberculosis is interested in reducing the great toil of death from tuberculosis, and not only that, but in cutting down the tubercular sickness. One of the things we are trying to do is to register every single case of tuberculosis in Virginia. Why do we want to do that? Because we know that every single person who dies from tuberculosis leaves behind from five to nine contact cases, and most of those are babies. Often you are going to find mothers who are very careless when they have tuberculosis, letting their children crawl over their

beds. You can do a lot by talking to the mothers among your patrons, telling them that they must not do things like that.

That Bureau is also interested in having periodical examinations made. I am sure you have heard about that. They are trying to get people to go to the chest clinics to have their chests examined. Now let me warn you of something. Everyone of you must have a medical examination at least once a year. I am not talking about an inspection; I am going to talk about that later. I am talking about an examination, and only a doctor can make an examination, although you hear real nice people say a nurse or a teacher can make an examination. They cannot.

When you go to have your medical examination, let me tell you something. You know, doctors are going to be your best friends, and sometimes they get tired of people saying they do not want to strip to the waist for the examination, and so they get a little careless about it. I say to you, do not ever, ever, let a doctor examine you unless you are willing to be stripped to the waist. Strip yourselves to the waist and have the examination made that way, because your lungs go from above the collarbone (here it is), down to the margin of the ribs. You cannot hear the soft breath sounds that come in and out of the lungs through clothes. Don't you ever think you can, because doctors cannot really tell the condition of the lungs unless they can put the stethoscope right on the skin.

The Bureau of Malaria Control, in coöperation with the United States Public Health Service, is endeavoring to absolutely wipe out malaria from the tidewater sections of Virginia. Not only are they trying to destroy the *Anopheles* mosquito, but they are trying to reduce the whole mosquito pest.

The Bureau of Social Hygiene, in coöperation with the Social Hygiene Association, is doing a very splendid work in parenthood education, and the gist of what they are doing is this: They are trying to give some few facts and points in order that you may handle subjects and questions that come from your school children. All children ask all kinds of questions, and this bureau is trying to give you help in answering the sex questions of the children. We are going to the mothers and teaching them how to answer the questions of the children. The mothers have not learned yet, but when they have learned, then

your work will be reduced considerably. But to-day, until we teach the mothers—and the mothers are learning, but it is very slow work, because there are a good many mothers in Virginia—the teachers will have to answer the questions.

Then there is a Bureau of Epidemiology. That is a long word, but it is one we have to use. They collect the sickness rate from all the doctors in the state, and most of the doctors report the reportable diseases, that is, the communicable diseases. They are particularly anxious to wipe out diphtheria, typhoid fever, and smallpox, and are trying very hard to do so. Do you know that in the report you folks sent in a year ago it was shown that 111,000 children in Virginia had never been vaccinated for smallpox? Is there not a big work for you to do? Get busy!

Publicity Bureau. This Bureau is busy right now with toxin-antitoxin protective treatments, because the whole United States is interested in getting all children, especially the children before they get into school, protected against diphtheria. Publicity speaks for itself. We are trying in every way we can to teach people the things we want them to know.

The Bureau of Child Welfare is interested in quite a number of very definite things. We have a hundred counties in Virginia, and only 35 of them have nurses. Sixty-five counties have no nurses. Therefore, in many counties where you will go you will have to put on the health program, under the superintendent, alone. I am sorry. I wish we had enough nurses to go around. Our nurses carry to the people reports of the work of the State Board of Health. Although they have 18 activities, their biggest work is going into the homes to teach the mothers all kinds of things bearing on health, and to the school to help the teacher put on her health program.

Health Education. This West law is just one of the things we are interested in. Out of the 38 institutions of higher learning in this state 33 colleges are offering this course. We require also that every teacher shall take it, and do you know that about 98 per cent of the teachers in Virginia have already taken this course, or a similar one, not extensive, but just a minimum course, to learn how to safeguard the health of the child in the schoolroom?

Physical Inspection. Again the West law says that every child

shall receive, along with his education, a health examination. We interpret that to mean an inspection, what you have already been taught to do, that is, test the vision, the hearing, look carefully at the teeth and the throat, weigh and measure your pupils. You have been taught to do that, and I do not want a single one of you to go out of this class at the end of your course without absolutely knowing how to do that inspection, because when you get out in the rural districts you will have to do it, and in 65 counties you will not have a nurse to come and aid you, so you will have to depend on yourselves. Therefore, learn how to do it!

Last year 91 per cent of the children in the rural districts were inspected by teachers. In the cities, 86 per cent of the children were inspected, 88 per cent of all children of the state as a whole.

We have twelve dentists, under a director, and we are endeavoring to meet the dental needs of the children in the rural districts, and to put their mouths in order.

Of course, the Sheppard-Towner Maternity and Infancy program is a tremendous program. We are endeavoring to do everything the other states are doing in that work. We have 4,000 midwives, and are trying to solve the midwife problem. We are trying to get mothers to have better maternity care. We are trying to give information to mothers about the care of themselves before the baby is born, and to help in that we offer a mother's correspondence course. Nearly a thousand mothers have completed this course, and about eight hundred are enrolled in the course now. Then we are trying to get the babies taken care of during their early years.

One more thing, and then I will close. Switching back to the school program, it was the teachers themselves who demanded that something more be done about the inspection than just year after year and year after year inspecting the children. They were inspecting children year after year, and not getting anything like the number of corrections needed, and it worried them quite a good deal. We realized that some way must be found to get more corrections of defects. But we knew that we must give them a definite standard, which they could reach in a small school, down in the rural districts, with no nurse in the county, no one except the teacher herself to rely on. A teacher said: "I just want to get my children to come up to the five points,

and that is all." One of the nurses in our department began to work on this teacher's idea, and evolved the standard of "The Five Point Child." You probably have all heard about this standard. I have here a few of the folders explaining it. The Five Point standard is that vision shall be normal or corrected; hearing, able to hear the conversational voice at twenty feet; throat, nothing shall be wrong with it, or tonsils and adenoids have been removed; teeth shall be reasonably clean, no exposed roots and no unfilled cavities; weight shall not be 10 per cent under or 20 per cent over normal.

We have all the troubles Doctor Faber of San Francisco told you about last night with the height-weight tables. But we have adopted the Baldwin-Wood table as the best we knew of, and although we know that every child who is within that may not be perfectly all right, or that all children who are outside are not all wrong, still this is the standard table we have accepted right now.

In closing, I want to know how many of you are Five Point children. A man said to me the other day, "I do not see what you want to set such a low standard for." I said to him, "Are you a Five Point Child? Are your teeth all right?" He said, "No, I have to go to the dentist." I said, "Is your vision all right?" He said, "Oh, no, I have to have my glasses changed." I said, "Then, if you cannot measure up to a minimum standard, you had better accept that standard, and not try to get up to a higher standard of perfect physical fitness until you yourself have reached the first standard."

I am going to ask you to hold your hands up and give me an idea of how many of you are Five Point children. I have gone to our colleges and have found one college, though I am not going to tell you the name of it, where 1 per cent of the students were Five-Pointers, another one where 5 per cent came in that class, another one with 20 per cent, another with 15 per cent. But the best college of all is Stonewall Jackson, with 60 per cent. We are very proud of that. All those students are college men and women, and the majority cannot measure up to the lowest standard. I am going to ask you six questions, and I want all of you young people to hold up your hands: How many of you know that your vision is all right, or has been corrected? How many of you know that your hearing is all right? Fine! How many of you know that your throats are all right? How many of you know

that your teeth are all right? How many know that your weight is 10 per cent under or 20 per cent over normal? How many of you held up your hands five times? Twenty-five per cent of you put your hands up five times.

### WEDNESDAY NOON

#### *Affiliated Agencies' Luncheon*

*Presiding:* MISS HAZEL CORBIN, General Director, Maternity Center Association

#### Measurement of Progress in Health Work

MURRAY P. HORWOOD, PH.D., Assistant Professor, Department of Biology and Public Health, Massachusetts Institute of Technology

## MEASUREMENT OF PROGRESS IN HEALTH WORK

MURRAY P. HORWOOD, PH.D.,

*Assistant Professor, Department of Biology and Public Health,  
Massachusetts Institute of Technology*

THE subject I was asked to speak on to-day is the Measurement of Progress in Health Work, and I think it is only logical for us to inquire what we mean by "progress"? Our idea of progress to-day may be quite different from the idea of progress we had yesterday, and this in turn may be quite different from the idea of progress which we may have to-morrow.

We live in an era when public health work, and more particularly child health work, is on the ascendant. It is difficult to pick up a daily newspaper or a magazine or a business man's or professional man's journal without being impressed with this fact. That which is not carried across in the written message is certainly brought home to us through the public health nurse, the public health physician, and the various clinics and other avenues of information that are available in almost every community. This condition is not a passing fad merely; it is a permanent development which bids fair to grow to even greater proportions and significance with the passage of time.

The increasing urbanization of our cities and towns, our growing

populations and improvements in our means of transportation, bring in their wake more frequent opportunities of contact infection, and emphasize the greater need of public health work every day.

There is another reason why I think public health work will continue to grow. There is innate in man the desire to help his fellow men, and public health work presents a wonderful outlet for thousands of men and women to serve their fellow men. That desire is not to be thwarted or denied. It gives satisfaction and joy to innumerable thousands, and its potentiality for accomplishment is too great for it to stop its onward march. Rather, it is for the men of vision to lead and direct that spirit into the most fruitful channels, in order that mankind may be served most abundantly, and untimely disease and death prevented.

There is much to be proud of in the accomplishments of the public health movement in the United States. Not only have disease and death been prevented, and the life-span of man prolonged, but untold happiness has been brought to thousands of homes all over this country in this way. The infant death rate has been cut down so rapidly that the leaders in the public health movement have found it necessary again and again to place the goal higher and higher, so that the workers in this field might be stimulated to greater efforts and even greater accomplishment. Communicable diseases have been checked especially where suitable control measures are available. It is not surprising any more to hear of cities without a single death from diphtheria and even to learn that in some places where the child population has been immunized not a single case of diphtheria has developed within a year or more. Although this achievement is quite remarkable, it is being duplicated to a smaller degree in the control of the other communicable diseases of childhood. Many of the former terrors of childhood are gradually but surely disappearing. Even in the case of tuberculosis, a disease which was listed as the "captain of death" only about 25 years ago, there has been a reduction of from 60 to 70 per cent in the mortality during this short period of time. In those diseases, as typhoid, malaria and hookworm, where environment plays a significant part in their transmission, much has also been done to bring them under control and to diminish their annual ravages.

This brilliant picture of achievement which has meant so much in

the prevention of unnecessary misery, sickness and death, which has maintained the unity of families and given to countless children the benefits of mother love and paternal support and guidance, is but a challenge to the future. How are we to maintain this excellent record and make still further progress in this romantic pursuit of saving life?

Fortunately, the way out is at hand, and the method, simple to employ. The public health survey is an old and yet a new instrument; old in the sense that it has been employed for centuries; new in the sense that it is being used to evaluate and appraise our public health activities to an extent and degree never employed before.

Probably one of the earliest and most distinguished public health surveyors in the United States was Lemuel Shattuck, who in the sixties of the past century made a thorough public health survey of Massachusetts, and presented such a comprehensive report that the recommendations are still said to be a guiding star for the excellent health work always conducted by the Massachusetts Department of Health. But it is necessary to come down to more modern times in order to appreciate some of the more outstanding developments in this field. About fifteen years ago, the distinguished health officer of Providence, Charles V. Chapin, M.D., made a survey of state health activities in the United States, and prepared an excellent report on that subject, and shortly thereafter he gave us a score card for evaluating municipal health activities, which unquestionably was the forerunner of the present very excellent appraisal form. The public health surveys of the Russell Sage Foundation, under the direction of Franz Schneider, Jr., and the infant mortality surveys conducted by the Federal Children's Bureau, were further proof of the value of this method of analysis and appraisal.

Later, Haven Emerson, M.D., gave us his excellent report on the Cleveland Health and Hospital Survey, but it was not until the American Public Health Association, through its Committee on Municipal Health Department Practice, decided to survey the health conditions in the large cities of this country, under the chairmanship of Professor C.-E. A. Winslow of the Yale School of Public Health, that we took the first step towards utilizing the public health survey for promoting public health work on a basis on which it ought to be employed. Hard on the footsteps of that report, which appeared in



1923, came the outstanding report made by the Research Division of the American Child Health Association on the health conditions in 86 of the smaller cities. To my mind this report is one of the most far-reaching contributions that have been made to public health administration in a generation.

As the result of these two reports, two very important contributions were made. First, ideal set-ups were developed for complete health programs in cities having a population of 50,000 and those having a population of 100,000 or more. Thus, the smaller and larger cities of the country may determine quite readily, whether or not they are doing all they should to protect the public health adequately.

The second contribution, and one which I think is surely destined to affect public health progress to a remarkable degree, has been the development of the Appraisal Form for evaluating the health activities in our municipalities. That, fortunately, has been placed under the able direction of Doctor Walker, who is now with the American Public Health Association, and has led to much important work during the past few years.

More recently still, there appeared through the assistance and coöperation of the United States Public Health Service, the second report of the American Public Health Association Committee on Administrative Health Practice, which discusses the health conditions in 1923 in 100 cities in the United States having a population of 70,000 or more. I would commend to your careful consideration particularly, the chapter on School Health Work by H. H. Mitchell, M.D., of this Association, which I believe to be one of the best and soundest expositions of this subject that has yet appeared in print.

It is so easy for official, and even for voluntary associations to continue in their present path of endeavor, and if the work becomes too strenuous, to add additional workers as a public health nurse or a physician. It is infinitely more difficult for the official or voluntary agency to decide to have its own work analyzed and appraised, in order to determine whether its job is being performed effectively, soundly and well. But what is more significant than to determine whether the money available for health work is being spent wisely and most effectively and whether the energies of the organization are being directed at those particular problems and places in the community to yield the

most satisfactory results? These facts can be determined only through self-analysis and self-appraisal. The organization or community that uses these instruments is bound to have a progressive and efficient program, while, if it goes ahead aimlessly and thoughtlessly, but simply with the pious hope that all is well and all will come out satisfactorily, that organization or that community is destined to failure and to needless extravagance.

In view of what has been said already, it is perfectly fair, I believe, to inquire into the value of public health surveys. Is it possible to point to definite places that have been surveyed, where good has been accomplished? My reply must necessarily be in the affirmative, for there are numerous places throughout this country where effective health work has been initiated following comprehensive, scientific public health surveys. Doctor Crumbine and Doctor Palmer, who have been in close touch with the follow-up work of such surveys, could cite numerous examples of the value of surveys, I am sure. But there is time here, to describe only one instance where a health survey led to definite important reforms.

In one of the large New England cities, we have had an interesting and exciting time during the past year following a survey of that community. The survey was presumably a tuberculosis survey. Actually, it was impossible to make such a survey without touching on many other health activities, such as child health, school health, and many other health activities that are normally considered part of the general health program. The situation in this community prior to the survey presented an unusual condition. There was an unpaid Board of Trustees, responsible for all the anti-tuberculosis work in the city, and this board conducted one large clinic, a hospital for advanced cases and other activities of a minor nature. People from all parts of this great city had to file into this single dispensary for examination, regardless of condition or distance, and little or nothing was being done for the treatment of early and favorable cases of tuberculosis.

Most of the health work of the community was being concentrated in the so-called foreign quarter, the quarter where overcrowding and poor housing conditions prevailed. Careful analyses showed that the health problems in other sections of the city, were much more acute. As a result of this survey, several important changes were introduced.

First, the tuberculosis work was placed under the health department, and a separate division of tuberculosis, with a full-time director, was established. Thus, the official anti-tuberculosis work in this community has been recognized as a municipal health department function, on the same basis as the control of diphtheria, scarlet fever, or any other communicable disease.

A second achievement of this survey was that the control of the tuberculosis hospital was removed from the voluntary Board of Trustees and placed under the City Hospital Trustees. In this way all the hospital facilities of the city have been brought under unified control, an arrangement which is extremely desirable.

A third accomplishment of this study was the clear indication of the need for concentrating the anti-tuberculosis activities in those sections of the city, where because of the large Irish and colored populations, the mortality from tuberculosis was especially high.

A fourth change this survey brought about, was the decentralization of the clinic service. Instead of being located in one single place only and requiring the people to come to it from all parts of the city, various clinics have been established throughout the city, in order that the people may be served more readily and conveniently.

It would be possible to enumerate many instances, if time permitted, not only in New England but in many other places in this country, where noteworthy improvements followed in the wake of public health surveys. As a result of such surveys, full-time trained health officers have been appointed, milk supplies have been improved and supervised more effectively, water supplies have been safeguarded more adequately, school health work has been improved, and various other municipal health activities placed on a sound and scientific basis for the first time. Such are the results of self-analysis and appraisal. Isn't it wiser and cheaper and more business-like, to study one's problems carefully and intelligently, to know where the fires are burning most fiercely and to apportion a budget to meet the particular needs of the community according to their magnitude, than to go ahead simply with the hope that everything will turn out well? The very fact that efficient organizations like the American Child Health Association, the National Tuberculosis Association, the New York Tuberculosis and Health Association and others are constantly analyzing,

evaluating and planning their work scientifically, is but added evidence of the importance, wisdom and utility of the survey method.

There is another value of the public health survey which may be overlooked, and that is its educational value. The public health survey is an excellent medium for stimulating popular interest in public health work, for educating people in the principles of healthy living, and for getting moral and financial support for an effective health program.

These considerations ought not to be lost sight of. The moral of it all is, that it is worth while for us in public health work to cast our bread upon the waters, for it will come back to us many fold. It is also important for us to remember that as we sow, so shall we reap. If we sow properly, wisely and intelligently, we shall reap abundantly.

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## WEDNESDAY

### *Afternoon Session*

#### THE MEDICAL SCHOOL AND CHILD HEALTH: EXPERIENCE WITH COURSES IN PREVENTIVE PEDIATRICS AND PLANS FOR FUTURE DEVELOPMENT

*Discussion by members of the pediatric departments in the medical schools of the following universities:*

Washington University, St. Louis

BORDEN S. VEEDER, M.D., Professor of Clinical Pediatrics

Harvard University, Cambridge

RICHARD M. SMITH, M.D., Assistant Professor of Child Hygiene, School of Public Health

Stanford University

HAROLD K. FABER, M.D., Professor of Medicine (Pediatrics)

University of Virginia

LAWRENCE T. ROYSTER, M.D., Professor of Pediatrics

Georgetown University, Washington, D. C.

JOHN A. FOOTE, M.D., Professor of Pediatrics

Columbia University, New York City

HERBERT B. WILCOX, M.D., Professor of Diseases of Children

University of Chicago

CLIFFORD G. GRULEE, M.D., Associate Professor of Medicine, (Pediatrics)

*Informal discussion:*

THOMAS D. WOOD, M.D., Professor of Health Education, Teachers College, Columbia University



# WASHINGTON UNIVERSITY MEDICAL SCHOOL AND CHILD HEALTH

BORDEN S. VEEDER, M.D.,

*Professor of Clinical Pediatrics, Washington University School of Medicine, St. Louis*

THE subject for this afternoon's discussion is the Medical School and Child Health. This is a rather formidable subject in many ways, and one that most of you must look upon as a most technical subject. It is a subject, however, that those of us who have been interested in child welfare and child hygiene have been interested in for a good many years. Despite all the work that has been done by states and municipalities by far the greater number of children are under the care of their private physicians, and they must depend upon their private physician for child health and guidance rather than upon municipal or state organizations. The medical man in the past has been trained almost entirely to think in terms of disease. From the time the student enters the medical school, disease is stressed with the result that nearly every man who has been in practice for a few years thinks of his patients in this way.

There has been in recent years a change in the feeling of men who have been teaching in the medical schools, leading to the viewpoint that the subject of preventive medicine and health must be stressed. One of the most important functions that we have in many ways is the training of medical students to think of children in terms of health and not in terms of disease or sickness. It is for this reason that this symposium on the training of medical students and courses in preventive medicine was placed in the program.

I was asked to speak of what we are trying to do at Washington University in the School of Medicine with which I am connected. We have had a good many upheavals in the last few years in our medical school curriculum. From an absolutely prescribed curriculum, strictly adhered to, taking all of the time of the student, we have been changing to an elective system. We believe that the great trouble with education in this country, from the standpoint of higher technical education, is that we ask our students to take courses and to behave and take exami-



nations, exactly as if they were elementary school, high school or college students. During the past few years we have been changing our courses so that they lead up to a point in the last year where a large part, almost one-half, of the senior year is purely elective. This gives the student an opportunity to take courses in different subjects in which he is particularly interested or to do research or scientific work.

It has been a question with us as to how much child hygiene work we can or should put in our course. Every head of a department seems to feel that there should be more time given to his subject in the medical school. The man who teaches anatomy feels that the student should have more anatomy, and the man who teaches pathology feels more time should be given to pathology, and the man in internal medicine insists that the students do not get enough internal medicine and that they should have twice as much time on it. The man who is interested in a clinical specialty as ophthalmology and who deals purely and simply with the eye, thinks that the average student does not get enough training in his line of work. The result is that a faculty meeting for the discussion of the curriculum is somewhat of a free-for-all fight, and the man who can talk the loudest and talk the longest and be the most stubborn has an advantage for his subject. So that you see that as teachers or instructors we are very uncertain how much time can be given to each individual subject, particularly as the stated time for each subject is being cut down.

With the necessity for cutting down the number of hours in each subject we are not able to give as much preventive pediatrics as we would like or feel is desirable. The students do not begin pediatrics until the third year when they receive a series of formal lectures, about ten of which are given on the subject of normal growth and development. The same year they have a course which is called "physical diagnosis," which is in reality a study of the normal child as compared with the abnormal. In this course he must examine children, determine the state of nutrition, etc. These courses are compulsory. In the fourth year the students receive one clinic a week. In this course talks on psychology, behavior problems, and the like are included. One morning a week, for one-sixth of the year, is spent in the wards of the Children's Hospital. The pure hygiene work, which includes a discussion of methods in welfare clinics, comes under the Department

of Hygiene. This is not satisfactory as a whole because the modern student is becoming interested in approaching medicine from the standpoint of health.

One of the most interesting things has been that 75 per cent of the men in the senior class have elected pediatrics as one of their elective courses. Some 20 per cent have taken the maximum number of hours and a large part of this time is spent in the Out-patient Dispensary, where they obtain individual work in the Well-Baby clinic.

With the constant growth of medical knowledge and the development of the specialties, we have reached a point where it is impossible to teach everything. In the past years our four-year medical course has become so overloaded that the student has of necessity been reduced to a grind and has had very little chance for real thought or development. With the change which is being introduced into medical education of minimizing the formal teaching and cutting it down to essentials, we must of necessity omit a great many things which might be desirable to teach but which one can hardly say are essential. So much for the undergraduate work.

Several years ago we instituted a month's work in post-graduate education for men who have been out in practice. It was rather experimental, and yet in the long run I think that it has been one of the best things we have done in our medical school. For the past three or four years we have had the maximum number of men we will take, somewhere from 65 to 70 men a year, from all parts of the United States and from foreign countries. They come in for a four weeks' course, which is absolutely separate from the regular undergraduate course. It means a lot of work for the staff, but we feel that we are getting results. In this course we do give something of the preventive viewpoint of pediatrics. They receive two lectures a week throughout the four weeks and go directly into welfare centers for two hours a week. In addition to that they receive a certain amount of training in the normal growth and development of the child. So that these men coming from all parts of the country not only receive a certain amount of training in regard to the treatment of disease and modern methods of feeding, but a certain insight into what we call hygiene and preventive pediatrics. I have been much gratified to receive letters from a number of these men who have gone back into the small communities,

because many of them come from small communities, and to learn that at least 10 or 15 per cent of them since they have returned to their own communities have become definitely interested in child hygiene work and measures. We do not attempt to turn these men out as specialists in pediatrics. Of course that cannot be done in a month, but they do go back home with the idea that pediatrics is something different from treating the child when it is sick. One thing that has been interesting me in talking with these men has been the answer to the question, "Why did you come here and give up a month at your own expense to study pediatrics?" They are men who have been out of medical school for from 15 to 25 years. Almost without exception the answer is something like this, "The people in my community are demanding something of me in connection with their children I cannot give. Somebody has got to give it, and as I am interested in children, I want to learn what this thing is." It is a fact that the people at large have demanded of these men something in regard to the guidance of their children that is more than simply the care of the child when he is sick. They are demanding something in regard to preventive pediatrics and that is the thing that has fundamentally compelled these men to come from all parts of the country for post-graduate work.

That, I think, gives in as brief a way as I can do it, what we are trying to do at Washington University in the way of preventive pediatrics. As I said this discussion this afternoon is rather a technical subject, and I am rather surprised and interested to find how many people who are not physicians are interested in medical education.

*Doctor Veeder:* We will next hear from Doctor Smith, who will tell us what they are doing at Harvard.

# THE HARVARD UNIVERSITY MEDICAL SCHOOL AND CHILD HEALTH

RICHARD M. SMITH, M.D.,

*Assistant Professor of Child Hygiene, School of Public Health, Harvard University*

I WANT to say just a word by way of introduction on the conception of child hygiene in general before I start with the actual teaching as we carry it on at Harvard. In the first place, the amount and character of the instruction in child health to be given to medical students is determined by the point of view toward medical education as a whole, and by the conception of the place which child health occupies in the organization of medical practice and public health administration. There are two differing methods of teaching medicine as there are in general education. One method tries to cram the student's mind with a great mass of information. The other attempts to give only the essential facts concerning any subject, and devotes its major energies to training the student to think, and to use efficiently the facts at his disposal. This latter method necessitates the granting of considerable free time for reading and individual study and, therefore, reduces the actual number of hours available for didactic exercises. At the Harvard Medical School we are committed definitely to the latter method of teaching. This limits the amount of time which can be given to child health as such, to a very few hours. One must consider the whole scope of pediatric training in planning instruction in any portion of the department.

I might say that the men in their first year, as soon as they get through with the fundamental sciences, are given three afternoons a week during which time they can take extra courses or read in the library. It is rather interesting to see what a large proportion of the men make good use of that time. We feel quite definitely that the change which has been going on in the curriculum in the last few years, of giving more free time and demanding less didactic work, has been a success, and the tendency is towards more free time rather than more required work. This reduces our pediatric hours to a considerable degree.

Child health may be considered under two important divisions: Preventive pediatrics, so-called, and community organization. Preventive pediatrics includes all the things which are done for the individual child to secure for him every known advantage for normal development and prevention from disease. It is a positive endeavor to secure a normal infant at birth, to maintain nutrition at an optimum point throughout the period of growth, and to institute such procedures as will result in safeguarding the child from the effects of disease. Community organization is concerned with the functions of public and private agencies, looking toward the protection of the health of children, and is a part of the general public health program. It deals especially with environmental factors, the administration of work for children in groups, and the care of the handicapped in homes or institutions.

Our first endeavor in teaching child health is to create a point of view on the part of the student which will make him appreciate that interest in and work with normal infants and children is an essential part of medical practice, and that, if he fails to train himself in that particular, he will be a poor doctor. This, of course, necessitates an understanding coöperation on the part of all the members of the teaching staff. This attitude is made easier because of the fact that a considerable number of the men who are teaching the undergraduate students are themselves actually engaged in conducting conferences for infants and children and are, therefore, concerned with the supervision of well children in addition to taking care of sick children in the hospital and in private practice. This arrangement is possible because of the plan of the Boston City Health Department, whereby the medical personnel of the child conferences conducted by them is provided by the pediatric departments of the medical schools in the city. Such an arrangement is of distinct benefit to the health department, because it relieves them from the pressure of those who might seek the positions for what they could get out of them, but who are not properly qualified to do the work; and it is of value to the medical school in furnishing a group of well children who can be supervised and studied with care, to the advantage of the students as well as the children. This contact with the city health clinics, which are a part of the work of the child hygiene division of the city health department, provides

a direct means of establishing a sympathetic attitude toward community organization for health, and gives an opportunity for the pediatric department to enter into the administrative functions, in some measure, of the public health department. The nursing for these conferences is done by city public health nurses, organized as a division of nursing, working on a generalized plan, and dealing with all the aspects of prevention and communicable disease control. This makes possible a further association with work in the homes, and also demonstrates the measures employed to prevent the spread of infections.

We have tried in the past numerous methods of giving to undergraduate students definite instruction in child health. In general it has been found that they have not progressed far enough in their medical training to appreciate a presentation of the details of community organization.

We, therefore, content ourselves with giving to them one lecture in the third year in which this phase of child health is discussed in outline, in order that they may at least be familiar with the relation which it bears to pediatric practice.

We have an elective system also, at Harvard, but the student must choose certain things. He must plan one month of medicine, one of surgery, one of pediatrics, and one month of obstetrics. The rest of the time is free. A considerable number of men take a second month of pediatrics. In the one month required in pediatrics, the students spend one afternoon a week in different city health clinics. They are taught the care of the normal child and they acquire a general understanding of the methods used in dealing with children in groups. They should, as a result of these exercises, be sympathetic, not antagonistic, to organized public and private endeavor for child health, and get a glimpse of the opportunity for further work in this department of pediatrics. We think that that is just about all that we can do for the undergraduate student in specific training on the strictly child hygiene side of the work, but we do emphasize, throughout the curriculum, the care of the normal child and the prevention of disease.

There has been a tendency in the past for persons to enter the field of child hygiene without adequate preparation, either in pediatrics or in general public health. We believe that those who are to devote themselves to child health should have a thorough training in pediatrics,

and this cannot be obtained without more time devoted to it than is given in the undergraduate years. Provision is, therefore, made for resident post-graduate study as a Fellow in Child Hygiene. The person holding this appointment spends his mornings in the hospital clinic and his afternoons in field work. He has direct supervision of the medical aspects of the city child hygiene work done in the stations for which we are responsible. He is brought in contact with many of the phases of this work in its administrative details. He also does some of the teaching in the clinics, which the fourth-year students attend, and gives some lectures in the graduate courses.

In the School of Public Health there is an intensive course in child hygiene offered, which occupies the entire time for one month. In this course the various aspects of work for children are presented through lectures and visits to nearby institutions. An attempt is made to give a comprehensive bird's eye view of the whole field, furnishing the ground work and a point of departure for further study. This course is elected by certain members of the fourth-year class who are preparing for work in public health. It is attended largely by special students as a post-graduate course, or as a part of a longer course of study, looking toward a special degree.

We also offer in June a special post-graduate course in the Medical School. In this course the care of the normal child is emphasized, and a certain amount of information is given on the strictly child hygiene aspect of work with children.

We also furnish to our residents and internes in the hospital opportunity for work in the city health clinics, so that they come directly in contact with work for well children, and a certain amount of contact with the organized work which is being done.

For students desiring to investigate some special phase of child health, opportunity for research is open in connection with the School of Public Health. Several men have availed themselves of this and have been given degrees (D.P.H.), with their theses upon some subject in child hygiene.

We consider child health as one division of pediatrics. The instruction is planned and the work conducted on this basis. We think that the undergraduate can be taught very little of the details of the work. They can, however, get enough insight into the subject to appreciate

its possibilities for further study. The graduate student who wishes to specialize in child health should be well grounded in pediatrics by work beyond that offered in the undergraduate curriculum, and should devote considerable time to study and observation of work actually being done, and acquire some personal experience in administration by participation in that work.

*Doctor Veeder:* Whoever arranged the program seems to have made a very widespread distribution, geographically. Having heard from Boston, we will now jump to the far West, and hear from Doctor Faber, of San Francisco.

## THE STANFORD UNIVERSITY MEDICAL SCHOOL AND CHILD HEALTH

HAROLD K. FABER, M.D.,

*Professor of Medicine (Pediatrics), Stanford University, California*

STANFORD has for five years offered an elective course in preventive pediatrics. It is a notable commentary on the interest taken by our students in this subject that every year practically the entire junior class has taken the course. It serves, and this is all that didactic courses can be expected to do, merely as an introduction to the subjects discussed but at least it opens the eyes of our students to the really amazing development and present enormous scope of the child welfare movement. The course begins with a review of prenatal problems; the relation of the family to the child; economic and social factors; school laws; widows' pensions; orphans and the children of the handicapped; the handicapped child; the control of contagious disease. A lecture follows on vital statistics, then one on prenatal care in its various aspects. Two lectures are devoted to the general milk supply and its control and to certified milk. As a rule the class is taken on a tour of inspection to one of our certified dairies. A review follows of such phases of child hygiene as milk stations, visiting nurse organizations, the work of the Metropolitan Life Insurance Company, well baby centers here and abroad, foundling homes, health centers for older children, home visiting of new mothers, care of the preschool child, protective inoculations, care of the teeth, corrections of defects of the



eye, ear, nose and throat; posture, mental testing and the problems of the mentally defective child. Another lecture is given on teaching health in the schools with a description of the various methods in use and a discussion of nutrition classes, midmorning lunches and so on. The final hour is devoted to a description of the important agencies, private, semi-private and public which are devoted to child welfare.

On the whole the lectures have been most valuable in awakening interest, in letting students know how much has been done and can be done.

More important, perhaps, is the informal and in a sense incidental instruction which they now receive in the out-patient department. Stanford has recently adopted a plan of medical instruction under which all seniors spend the entire morning in the clinics, observing and, under supervision, actually doing much of the work. In pediatrics they have six mornings a week for four weeks. Now the Children's Clinic with us, as I suppose is true elsewhere, has become in a very striking way a community health center. I am not very far from the facts when I estimate that at least 60 per cent of our patient visits are of well infants and children and a considerable proportion of the remainder are for minor complaints brought to us in order that they may not become major complaints. We have the large group of healthy infants brought to us primarily for feeding direction who are given regular physical examinations and on suspicion have blood counts, Wassermann tests, urinalyses and so on. Home visits by the nurses are reported here and the home condition correlated with the medical findings. The discovery and control of contact with tuberculosis and other communicable diseases are important phases of the work both with infants and with older children. We make systematic efforts to have every child given the specific preventive treatments—especially vaccination and toxin-antitoxin—and every student gives these to at least one patient, and performs the Schick and Dick tests. He becomes familiar with the detection and treatment of congenital syphilis through the very careful scrutiny and testing given every prospective mother, and to her baby after birth, and with the energetic early antisyphilitic treatment which has so radically changed our notions of the curability of what was formerly held to be an almost incurable disease.'

The student sees also something of what can be accomplished by persistent and long-continued direction and control of a large group of children—half orphans, orphans, and children of tuberculous parents—placed in foster homes by our Associated Charities, whose medical direction is entrusted to us.

He is familiarized with the control of acute contagious disease, with the problem of the mental defective, with the care of the child with heart disease. He learns to look for early decay of the teeth, to instruct mothers and children in the importance of the tooth brush. He looks for flat feet, postural defects and other orthopedic deformities in order that they may be detected and corrected during the plastic age.

We are making a particularly careful study of tuberculosis with a view to detecting it early and protecting the affected child against its evolution into the more serious forms and the student becomes familiar with the difficulties and methods of precise diagnosis.

Special attention is given to disease conditions of the eye, ear, nose, mouth, throat and to the essential preventive value of such examinations in childhood.

So striking is the preponderance of preventive work in the Children's Clinic that the student, seeing all of it and himself actually doing a large part of the work, cannot fail to become imbued with the idea that his function in practice in later years will be not only to care for the sick but to do all he can to promote the health of his patients, particularly his juvenile patients. He is profoundly impressed with the magnitude of his opportunities for such service. The great advance which modern medical teaching has recently made consists in giving the student a direct contact, a personal experience of great impressiveness, with actual preventive work, with its peculiar problems and with the practical methods of dealing with them.

*Doctor Veeder:* One of the most interesting developments, I think, of pediatrics in recent years has been the increasing amount of attention that has been given to pediatrics, in the south. I think very few of you realize the rapid growth of the child hygiene, of the child welfare, movement in the south, and particularly the interest among men who are practicing medicine in public. I think it has extended throughout the South in recent years much more rapidly than it has

in any other part of the country. I know they are doing a great deal in their medical schools, and I know that that section is one of the most active that we have.

Some of you may not be familiar with the fact that a seminar is being held in North Carolina every summer. I am glad that Doctor Royster is here, and he will be the next speaker.

## THE UNIVERSITY OF VIRGINIA MEDICAL SCHOOL AND CHILD HEALTH

LAWRENCE T. ROYSTER, M.D.,

*Professor of Pediatrics, University of Virginia*

UNTIL and through the year 1923, there was no Pediatric Department in the School of Medicine at the University of Virginia. Children were attended by members of the Department of Internal Medicine, and Pediatrics was taught by the same teachers, as a subsidiary branch of Internal Medicine. In that year, it was felt that at least a beginning should be made in the development of a separate Department of Pediatrics, although the physical equipment of the hospital was inadequate, and there was no endowment or special appropriation beyond the salary to be paid the professor. I was asked to accept the position and did so, fully realizing the many and apparently insurmountable handicaps. At that time twelve beds were assigned to children and included those for newly born infants in the obstetrical department, medical, surgical and orthopedic cases. There was no Out-Patient Department for children and no room in which such a department could be conducted. A new wing of the hospital had just been completed and shortly after my arrival, was dedicated to obstetrics and children, and the newly born infants were turned over to the Pediatric Department at birth. Within a reasonable time, a small building was erected, adjacent to the Out-Patient Department and in this was housed the Pediatric Out-Patient activities. The accommodation for children in the hospital at the present time is approximately seventy beds; including newly borns, medical pediatrics, orthopedic and surgical cases and certain eye, ear, nose and throat cases; and although all children are assigned to the service having the principal care, they are all under the

Pediatric Department so far as administration of the building, medical care and nutrition are concerned.

It might appear to some that the handicaps encountered in the development of this department were serious, and they were; but in many respects the situation had its advantages. Three outstanding advantages appeared to me. First, no traditions of administrations were established, necessitating revolutionary changes. Second, since no money was appropriated, a free hand was allowed the head of the department in dispensing any money which was donated from private sources, for the conduct of the department. Third, the University of Virginia is situated in the mountains of Virginia in close proximity to a people, a large proportion of whom are relatively uninfluenced by modern civilization, the available food unbalanced, and whose children have never been under observation from a pediatric standpoint. Thus our work began in a virgin field medically and sociologically.

For clinical and teaching purposes, the Pediatric Department is divided into two main branches: 1. The Hospital service—almost entirely remedial in its efforts except for newly borns, care of these being largely preventive. 2. The Out-Patient Department, which is subdivided into (a) a daily clinic for sick and well children (as far as possible, seen on different days); (b) field work in the mountains of Virginia. This is, of course, in addition to the conventional classroom lectures.

In the hospital, fourth-year students work in sections for six weeks at a time on each major service. Patients are assigned to students in rotation; histories are taken and physical examinations made and recorded by them, and the course of illness followed and written comments made; these are daily checked by an instructor, and the work corrected by him. Comparison between the normal and abnormal child cannot well be made in the wards, but even here, an effort is made to point out to the student how far each child differs from the normal in every respect, and how this particular illness could have been prevented is emphasized. In the nursery—the newly born service—the normal infant is stressed and preventive pediatrics taught intensively. This includes nutrition (through complemental feeding) and the prevention of complications in the well baby. These infants remain in the nursery two weeks and are then transferred to the Well Baby

Clinic of the Out-Patient Department, where they are followed closely throughout infancy and childhood.

In the Out-Patient Department, third-year students are assigned to this service for two months, and daily clinics of two and a half hours are held. The students are instructed intensively in history taking, and the observation and recording of signs and symptoms. In the Well Child division of the Clinic, the evidence of what may be called a normal child is emphasized and deviation from the normal demonstrated. Here too, the early symptoms of disease are more apt to be observed and in the presence of the students, the instructors question the parents carefully as to the circumstances leading up to illness if it is present, and are given talks by these instructors in the care and feeding of children, and sanitary home conditions, special stress being placed on how to keep a well child well.

All children, either sick or well, who attend the clinic are followed up in their homes by a trained public health nurse, accompanied by a student nurse from the hospital. The students themselves are also required to visit some of the homes of the children seen by them in the clinic and to submit a written survey of the home conditions observed, with their recommendations for improvement of conditions found. All of this work is credited on the class standing.

In the division of our Out-Patient Department which has been alluded to as field work, there are four nurses. One or two field clinics in the mountain districts are held every week, in the public schools, mission schools, churches or private residences. These clinics are attended by the head of the department or his assistant, and accompanied by one of the hospital internes, by a group of students, the field nurse assigned to that particular district and one or more student nurses from the Training School. After these clinics (or surveys as I prefer to call them) are held and recommendations made, the children are followed up in their homes by the field nurse. Individual instruction is given by these nurses to the mothers, and children who require attention at the clinic or in the hospital for remedial purposes, are brought in by the nurses, sometimes a distance of forty or fifty miles. Each nurse has her own car furnished by the clinic. In this way a large clinic has been built up which enables students to see some normal children, many who deviate from the normal to a slight extent, and

a considerable number in whom abnormal conditions are well advanced. This form of work enables the students to see home conditions which are in many instances responsible for the development of abnormalities in children.

This Out-Patient Department has grown in the last two years from practically nothing, to what we consider phenomenal proportions for such a length of time. I shall not burden you with statistics beyond stating that during the past six months 2,758 visits have been paid to the clinic and the clinic nurse to patient's homes. This includes 452 new patients admitted to the clinic. During the same length of time in the field work, 2,940 patients have been seen and a total of 2,180 home visits made. This number furnishes, as will be readily seen, a large amount of material for Out-Patient investigation. This phase of work is growing at a tremendously rapid rate.

A word about prenatal work. The obstetrical department employs a prenatal public health nurse, largely for educational purposes among the people, and at present does not furnish material for educating students. In our field work, a beginning is being made for prenatal instruction. There are in Green County (our most active field) a few midwives who attend relatively few patients, while the three doctors in this county attend largely the well-to-do, of whom there are very few. Obstetrics in this vicinity is a community affair, many women help any other woman whenever the occasion demands. The situation as far as education goes is difficult as will be readily seen and calls for a general educational campaign of all women in the community.

Our instructors emphasize preventive pediatrics. They endeavor to point out to the student what is a normal child and the methods for keeping the normal child normal and the well child well. It is apparent to all of us who have been in pediatrics for a considerable time, that what we call the normal child is based on a "norm" determined by the law of averages. Only the experienced observer can determine how far a child may deviate from this "norm" and yet be considered a normal child.

During the three and a half years that the department has been in existence, much thought has been given to how much pediatrics should be taught and in what manner to the undergraduate students of a State university.

We realize that the larger proportion of children are still attended by the family doctor, and it is evident that to the general practitioner we must look for an application of the principles of public health, and further, it is beginning to be recognized that the objects of public health can best be attained through the practice of prophylactic pediatrics. We have therefore, acted on the assumption that the majority of every graduating class will enter general practice and that in teaching pediatrics, the pediatric needs of the general practitioner should be stressed.

We are aware that in many places a combination of clinic and field activities such as has been described exists, but so far as we know, no such combination is attempted in connection with a teaching institution.

We try to admit to our hospital any patient needing hospital care, especially those cases which are of value in teaching. It is well known, however, that generally only the most serious and obscure cases find their way to the wards of a hospital; these cases furnish ample material for intensive studies in diagnosis and treatment and serve to stress the needs of coöperation and coördination between the various specialties. A relatively small pediatric hospital service supplies these needs. It is quite evident that the pediatric needs of the general practitioner are not served in undergraduate hospital training. We have felt therefore, that the Out-Patient Department, or Clinic, is the more valuable training ground for the general practitioner. Here it is that apparently normal children are seen and minor ailments met with. Here it is that contact is made with the parents. Here it is that the students hear the directions given to the parents by the instructors in pediatrics, and here they observe the earliest signs and symptoms of disease. In the Out-Patient Department the student gains his impression of what he is to face in private practice and is trained in the methods to follow when he meets the problems of nutrition, and all of the phases of the application of preventive medicine through the administration of prophylactic inoculation, and instruction in the personal hygiene of the children.

In McNair Wilson's "The Beloved Physician," that entrancing story of a unique and romantic character, Sir James Mackenzie is quoted as saying, that there are four stages in disease: "the predisposing stage, the early stage, the advanced stage and the final stage,"

and he further remarked that the history of medicine showed that disease could best be studied by starting at the end and working backward. "It can be said," he declared facetiously, "that ample provision has been made for the study of disease after it has killed its victim." The biographer adds that provision has been made also, on a generous scale, for the study of the advanced stage, but the predisposing stage and the early stages have not been studied and hence the power to foresee is lacking. It appears to us that there is a striking analogy between this wise observation and the plan we have outlined for the teaching of pediatrics to undergraduate students. The study of disease after it has claimed its victim is amply provided for at the autopsy. The study of disease in the advanced stage is likewise provided for in the wards of the hospital, certainly to the extent that we discover what can or what cannot be done to cure the condition. The early stage with its influence on the outcome of the particular disease is known but little if at all, while concerning the predisposing stage we as yet know nothing. The biology of disease has been studied but very little as yet, and no one knows why one patient resists disease and overcomes it, while another succumbs. There are many diseases concerning the true nature of which we know but little and yet we do know that many of these same diseases can be prevented. While medical science is endeavoring to clear away the rubbish and discover the underlying principles of predisposition and the bearing of the early stages of a disease on the final outcome, much can be accomplished by studying home and other environment, and applying the known principles of prevention. Much more can be accomplished by educating the public in the proper care of the present young generation so they will grow up virile and useful citizens. It is on this principle therefore, that we intensify on the Out-Patient Department and send the student out into the field to see the community and home environment, and thus are endeavoring to find out why children get sick.

*Doctor Veeder:* The discussion will be continued by Doctor Foote.



# GEORGETOWN UNIVERSITY MEDICAL SCHOOL AND CHILD HEALTH

JOHN A. FOOTE, M.D.,

*Professor of Pediatrics, Georgetown University*

YOU have heard of very extensive programs in large institutions, well endowed medical schools, and one state university. It is perfectly obvious that not only is there a very wide difference between medical schools, but also there must be a difference not only in prosperity, but also in degree of ability to train men for certain definite functions. There must be a difference in the type of man, perhaps, who will be trained at one institution instead of another. We would assume that the men entering a highly specialized and endowed institution would fit themselves for special work. We would assume, also, that men entering a smaller state institution, perhaps like the University of Virginia, would be more inclined, in the aggregate, to prepare themselves for general work than for special work in medicine.

There is still another class of school, and that is the small school which is not a state university. These schools are not endowed institutions. There are a number of such institutions that are serving quite definite functions. They cannot be done away with. They have to prepare men, who will have a knowledge of general medicine, and at first, at least, will do general practice.

Such an institution is Georgetown University; its Department of Medicine, which is about 76 years old, has no State aid. In that institution we have no heavy private endowment either and I should hate to ask our august Congress to give any local institution anything for such a purpose. We have very great difficulty in getting on. We have no benefits from a State legislature, because we have no State legislature. We have the Senate, which is our city council, and that Senate, whenever it is not too busy with other things, sometimes gives attention to the needs of our citizens. So our school is quite different from the larger institutions, and quite different from State-endowed institutions.

Now, what do we do in this problem of preventive pediatrics, in the study of the normal child? The students with us, in the third year, take up pediatrics, and our work is divided into two semesters. There

are 160 hours of instruction in pediatrics in the third year. The first 80 hours are devoted practically entirely to the consideration of the normal child. In other words, in those 80 hours they are taught normal physiology and elementary nutrition.

Doctor Moser, who has had an extensive experience in child welfare and child hygiene centers, has charge of that course. Because of the very important part that the diseases of the new-born, and new-born deaths, play in the scheme of mortality, they are also given instruction didactically as well as clinically in the care of the new-born and diseases of the new-born. A number of men group around that division. I do not call it a department, because "department" is too dignified a word; but some of these men prepared some very meritorious, rather elementary, papers on the care of the new-born and diseases of the new-born, which I gathered together, and which compilation we use as a textbook, and thirty hours are devoted to the diseases of the new-born.

Up to two years ago we were very fortunate in our clinical facilities. Doctor Moser at that time was at our university hospital, in charge of a very flourishing child hygiene center. Students were taught in that child hygiene center in groups. Then things began to happen. First of all, the Health Department took over the child health department, which broke up our personnel. Then the hospital started a very extensive building program, which curtailed the room, so that we have been for the last two years obliged to abandon the teaching clinic in the child hygiene department of the university hospital. However, we have now a very fine Child Hygiene Center in the Children's hospital, where most of our other clinical work is being done, and two assistants of our division of pediatrics are in that center, and we have made arrangements with them in our new curriculum to have students work there. The center is open every day. We have an average of fifty patients a day, and we conduct nutrition classes, infant and preschool divisions of the clinic. Our men will work in that department next year. Meanwhile Doctor Wall, whom all of you know, Doctor Moser, Doctor O'Brien and Doctor McLeod take groups of students throughout the year in the wards of the hospital, and during the first part of the session we try to emphasize the normal child, normal configuration, normal characteristics of the normal child, and Doctor McLeod is very enthusiastic about that. We simply try to get as near normal children

as we can, and to teach these men how to get their hands on the child. We try to make these young men familiar with the normal characteristics of the child, and to obtain some practical knowledge of the nutritional requirements of the child.

We have some of the groups visit, later in the year, a milk plant, and study the methods of safe milk marketing. Doctor Moser teaches them about milk, and modification of it, in the out-patient department; and in a general way we try to give them practical knowledge in the elementary health needs of the normal child. That is particularly stressed in the second half of the session. We think it is important, because if these men are to go out in practice, they must not suffer from pediphobia—that is, they must not be afraid of the child. Doctor Wall last year spoke of the fact that the average medical student was rather afraid of the very young infant. Now, if we give students sufficient experience in handling children—actually putting their hands on them—that fear will not be present. You know about the old lady who said that she dreaded going to Egypt, because she had never learned to speak hieroglyphics. A misunderstanding almost as ridiculous as that seems to exist with medical students in regard to children, and we are endeavoring early in the course to train men so that they are not afraid to talk to children and to pick them up and examine them.

In that course, as I say, we have no post-graduate school.

*Doctor Veeder:* The last speaker on the formal program is Professor Wilcox of Columbia University.

# THE COLUMBIA UNIVERSITY MEDICAL SCHOOL AND CHILD HEALTH

HERBERT B. WILCOX, M.D.

*Professor of Diseases of Children, Columbia University,  
New York City*

IT WOULD seem from what has been said that most departments give fairly adequate instruction as to the normal child and preventive medicine, and that most students get an adequate opportunity for the study of these two subjects.

We have heard that the student is instructed as to the normal progress and importance of growth and development; that he gets more or less information about the child's temperamental make-up, his structural increase in size and his functional increase in capacity; that he is well trained in the physical examination, and appreciation of the normal state in well children.

The trouble is that these subjects are usually presented as a part of courses aimed primarily at the teaching of disease. Information, therefore, as to the normal child is too often limited to a passing reference to normal growth, development, and nutrition as it comes up in connection with the teaching of infant feeding, or the consideration of susceptibilities and immunities in connection with the teaching of acute infections.

In other words, in the routine teaching, although constantly brought up for purposes of comparison, the normal child himself is not sufficiently emphasized. The normal child is not made an intrinsic and fundamental part in the study of diseases of children. The average schedule of the Class A medical school does actually include a study of normalcy in infancy and childhood and of better health and preventive measures, but only casually and by way of reference. The purpose is not to teach health, but quite the contrary, by comparison, to teach disease.

It may be perfectly possible, then, to make an apparently favorable report on the amount of time given to the teaching of the normal child, better health measures and preventive health medicine in any course.

Such reports will be fallacious, however, unless this teaching is divided into (a) intensive and (b) casual. By intensive teaching of the normal child and preventive medicine in children would be meant the exclusive study of the child as a normal individual, with the idea of teaching the student how to recognize and properly evaluate the signs of health, as a matter of individual interest and not simply for the purpose of understanding pathological conditions when later met.

The casual teaching of the normal child and of the preventive measures of child welfare would mean the opposite of the foregoing. It would mean the demonstration of the normal child structurally and functionally only as part of a course of study on deviations from the normal, *i.e.*, disease. It would fail to emphasize the importance of normalcy and its evidences as such. Such instruction does not teach, in the way it should, what these babies normally look like at birth and how rapidly they should gain those things which will make adults of them. It does not rightly emphasize the study of the well child, as an important basic part of pediatrics, but on the contrary casually, accidentally, for comparison, as against the really important thing, the study and appreciation of disease.

That is the point that I should like to make, that we are not teaching our students the necessity, the basic fundamental necessity, of studying health as health, and of studying the well child as a well child; that we are making the mistake as a rule of giving our students an opportunity of comparing an occasional well child to the all-important deviations from the normal, not in order that he may understand the well child's requirements, but in order that he may appreciate how far off from the well child his patient has become. The student comes to us as a rule expecting to learn of the child who carries a pathological lesion, and interprets what is said about that normal child or his normal organs as to be used primarily for comparison.

The purpose is, as a rule, not to teach health or preventive medicine or general hygiene, but to use those subjects as a lever by which to pry more information into the minds of the students as to the pathological conditions for which the patient has been selected. We should impress him with the fact that when he gets out into the practice of medicine his child or infant problems are going to deal more often, than in any other branch of medicine, with well individuals. These problems are

none the less complicated, because the well individual *in a state of rapid growth and development* has very unusual susceptibilities.

We do not often enough impress upon the student the fact that he may find his hardest problem in the outwardly healthful appearing infant or child.

Looked at from the standpoint of intensive teaching, the record at Columbia University, College of Physicians and Surgeons, for the third year is good. Of thirty-two lectures and thirty-two quizzes given the third year students, three are devoted to the study of growth and development in normal children; seven to nutritional conditions and feeding of normal children; three to matters of hygiene and to the measures necessary for the prevention of malnutrition; two to a study of the incidence of disease in childhood, morbidity and mortality; one to a consideration of the use of vaccines, toxin-antitoxins and sera in the prevention of communicable disease. In other words, about one-half of this lecture course is given to truly intensive teaching of health as a separate subject by itself.

The third year student is also given ten clinics, of which three are intended to familiarize him with the appearance and action of normal infants and children.

In the fourth year, the required course cannot be said to give so much attention to the study of the normal or of preventive health measures. Perhaps one-third of the clinic, classroom, ward and bedside instruction given the fourth year can be said to have directly to do with the teaching of the aspects of normal progress in childhood.

On the other hand, a large part of the elective work has to do with the study of the normal child, and the estimation of the evidences of good health. Of the various elective courses offered the fourth year men, more than twice as many choose the course which confines itself to the study of the normal than other courses offering opportunities for study and observation of disease.

We would admit, at The College of Physicians and Surgeons, that while the subject of health and prevention is fairly well covered, still we should more definitely distinguish between the value of the study of the normal and the value of the study of disease in childhood. We would recommend for ourselves that emphasis be laid upon the impor-

tance of the recognition of the fundamental health common to most children; and the capacity of the child to outgrow disease.

We believe that a student should be impressed with the fact that in the treatment of the young, he will be dealing more than in any other branch of medicine, with well children; that his problem will be no less complex, however, because of the potentialities of the years of rapid growth.

We think that the study of diseases of children may well be introduced by a comprehensive course in growth and development, the normal rate of growth, state of nutrition and stage of development, both structural and functional, and that this should include the pre-natal and post-natal periods. Following this, the student should be given careful instruction as to the general management of children, their daily routine, their protection from fatigue, excessive cold, heat, the proper clothing, ventilation, exercise and rest: that the philosophy and psychology of childhood be emphasized in order that the student may recognize the necessity for consideration of the temperamental aspect, as well as the physical, of the child under his care: that he be introduced to the physiology and anatomy through physical examination of the normal infant and that these all be presented for the purpose of equipping the student to evaluate the signs of health first before he is introduced to the evidences of disease.

Our elective students have an opportunity to select such subjects as they may be most interested in, and if they take pediatrics, they find themselves facing a course which we dare offer them more confidently than we do the obligatory students,—that is, the study of the normal child. It is a bit dull; child after child which has not anything wrong with him, which offers nothing unusual. Hidden evidences of disease do not come to the surface often enough to wake the student up. The search for evidences of health is by no means as interesting, and we find we can offer it more confidently to the man who comes to it voluntarily than to the man sent by the faculty, who feels that he must have this before he can face the state examination.

Our experience with graduate students differs somewhat from that of other schools. Our graduate students do not want instruction in the study of the normal or of preventive or better health measures. They want to be shown disease, to be taught how to recognize it by the

application of procedures of precision and they want to be shown the proper therapeutic procedures applicable to these diseases.

All this must be a source of great satisfaction to that one of us who, years ago, expressed his belief that any advances we have made in our ability to successfully take care of children, have come about through an appreciation of their general needs quite as much if not more than through any advance in scientific medicine *per se*.

If pediatrics is being properly taught, the student should leave the medical school well equipped in the art of general healthful management and the prevention of such abnormalities as are preventable. If this is done, he may well wait to learn later the specific therapy attached to such diseases as are amenable to definite treatment.

#### INFORMAL DISCUSSION

*Doctor Veeder:* I will ask Doctor Grulee, of Chicago, to open the discussion, and after that I will throw it open to whoever cares to discuss the subject, to ask any questions.



# PREVENTIVE PEDIATRICS IN CHICAGO UNIVERSITY

CLIFFORD G. GRULEE, M.D.

*Associate Professor of Medicine (Pediatrics)  
University of Chicago*

I DO NOT intend to tell my own experiences in teaching, but I want to give you some of the national background which makes it exceedingly difficult for the pediatric department to function in the way that it should. I recently made a survey of 17 of the leading schools in the country as to the proportionate amount of required work in pediatrics in the last two years, and I find that on the average the proportionate amount required in pediatrics is one-seventeenth of the schedule in the last two years but unfortunately I have to confess that my school is below that average. The highest amount that was given in pediatrics in the last two years was one-seventh.

COMPARISON OF TIME ALLOTTED TO PEDIATRICS IN MEDICAL SCHOOLS

School	Total Hours	Didactic	Clinical	Per cent of Total Hours
Rush (University of Chicago) ..	102	46	56	1/22
Stanford . . . . .	142	48	94	1/16
Pennsylvania . . . . .	104	42	62	1/20
Toronto . . . . .	125	45	80	1/18
Virginia . . . . .	123	53	70	1/18
Illinois . . . . .	112	40	72	1/18
Cincinnati . . . . .	204	80	124	1/7
Columbia . . . . .	170	60	110	1/12
Harvard . . . . .	215	71	144	1/11
Western Reserve . . . . .	264	64	200	1/12
Northwestern . . . . .	188	80	108	1/12
Iowa . . . . .	112	34	78	1/18
Tulane . . . . .	120	60	60	1/18
Washington . . . . .	154	60	94	1/11
Johns Hopkins . . . . .	117	36	72	1/18
Minnesota . . . . .	231	111	120	1/8
Average of Schools . . . . .	155	58	97	1/17

I ask you to keep that in mind when I tell you another thing, and that is that the National Board of Medical Examiners do not recognize pediatrics as a separate subject, and when the secretary of that board was quizzed on that subject, his letter said that he occasionally put in a question in pediatrics in the branch of internal medicine. When general medicine is as far back as that, the men who are carrying the

load of pediatrics in the country are going to have a pretty hard time of it to put over the work that they think should be put over, and feel must be put over, in regard to the teaching of child health and preventive work among children in the medical schools.

As I conceive of a department of pediatrics, there are four separate subheads under which we must teach. We must teach, above all things, diseases of the new born, because among the new born children there has been no reduction in mortality rate, or practically none, in the last 20 years.

Second, we have the branch which we are discussing here, that is the preventive work in pediatrics.

Third, we have contagious diseases, which is rather a large field but is probably the smallest of the four.

Then we have that field of diseases of infancy and childhood which properly covers the same field as does internal medicine in any of our medical schools.

When you have such a vast problem as that to contemplate, you must see that we are limited in the amount of work we can give in preventive medicine in the courses which we can give to an already overloaded medical student. He has already too much work to do, and to force an excessive amount of work on his shoulders is unfair. The question is what to do, and I confess I do not know. I give as much as I can in my medical curriculum. But I think that the two things we must force in order to get the proper recognition are, first, to see that the general medical world recognizes the necessity for more pediatrics in the medical school.

Second, I believe that we must see that the men get a proper recognition of this, because it is the only department, as departments in the medical schools now are run, which prepares a man for general practice. We hear a hue and cry regarding the preparation of the physician for general practice, and there is no department of medicine which prepares a man for general practice as does the department of pediatrics. The departments of internal medicine and surgery are breaking up into specialties already. I do not know how it is in other medical schools, but in the one in which I teach, practically all the teaching in most of the departments, especially in the department of internal medicine, is done by specialists, on the chest, on the heart, on gastro-intestinal dis-

eases, on diabetes, on nephritis; and each one feels that he must have his clinic. The only one who covers the whole realm of medicine is the pediatrician.

I think there is no question but that the men who are teaching pediatrics recognize the value of teaching the promotion of child health and preventive medicine. But we have certainly a hard problem before us in order to put this thing over as it should be.

*Doctor Veeder:* Will Doctor Wood close the discussion?

*Doctor Wood:* It is a revelation to learn how much the medical schools are doing at this time in the field of preventive pediatrics. I wish to pay my tribute to the very encouraging introduction which has been made to this important phase of the physician's training as I see it as a physician and as a student of this field of child health.

Doctor Wilcox has called attention to two important points of view regarding the normal child. It is of great importance that pediatricians and physicians in general should appreciate not only the characteristics of the typical or normal child as a basis of comparison, for a better understanding of child pathology, but that they should have a clearer understanding of the normal child as a basis for the better understanding of the child's possibilities for a better normal. I believe we need, there, what the school health study of the American Child Health Association hopes to accomplish, and that is to add something by study and experiment to our knowledge of the characteristics of health, and through this to find better measurements and tests of the value and efficiency of procedures for health improvement.

Doctor Dublin told us last night that approximately 130,000 children die each year in the United States between birth and fifteen years of age, whose lives might have been saved, and that the expenditure of perhaps \$300,000,000 annually for scientific health care of children would save this country in economic resources something like \$2,200,000,000 each year. The possible accomplishment of any such result as this by improved public health, by improved measures in preventive medicine and in preventive pediatrics, suggests the possibility of what would correspond to this if we understood a little better the possibilities for improvement, beyond the actual, towards the attainable health for every child in this land of ours.

## REPORTS OF AFFILIATED AGENCIES

EACH of the affiliated agencies was asked to make a report of any changes that had taken place in their work in the last year. This report was to supplement the one given in full in the Transactions of the Annual Meeting of 1926. Some of the agencies reported all changes in their work. Other agencies reported that their work had been carried on in much the same way, with perhaps changes in quantity or quality, but with no important change in the character of their work. Certain agencies sent in no report for publication in 1926 but report on changes made during that year. Other agencies still members of the Association have not sent in reports for 1925 or 1926.

The following agencies reported fully as to changes:

### CALIFORNIA

#### STATE BOARD OF HEALTH, BUREAU OF CHILD HYGIENE, SAN FRANCISCO

Only two additional lines of work have been undertaken in the past eighteen months. Our State Legislature, at its 1925 session, made the State Board of Health responsible for the inspection and licensing of maternity homes and hospitals. This responsibility was placed with our department and we have been busily at work endeavoring to educate and assist hospitals and maternity homes to provide such facilities for confinement as will safeguard the best interests of both mother and child.

Since September, 1926, we have been replacing our lectures to women's groups by a more intensive course of study in mothers' classes. These are conducted in five adjoining towns on different days of the week for six weeks and have been productive of a very much awakened interest and enthusiasm on the part of the women who have attended.

#### Long Beach

##### LONG BEACH DAY NURSERY

On June 21, 1927, our Nursery moved into a modern building which represents the latest improvements in the Nursery world. Our building is Spanish stucco, built around a patio, with spacious grounds, well equipped.

Our numbers have increased 75 per cent since we came here, our capacity being 100.

We employ a trained nurse, a teacher, a general assistant, and a student to work with the children.

Nursery school work, workshop, and a separate preschool wing are among our new features.

Since June 21, 1926, our undernourished have decreased from 25 per cent to 9 per cent.

## COLORADO

### THE STATE CHILD WELFARE BUREAU, DENVER .

We have added a very important division to our State-wide health work, which consists of taking an obstetrician with us on our Health Conferences in the rural sections of the State. This physician, assisted by a maternity and infancy nurse, holds prenatal clinics, carried on under the Sheppard-Towner division. So far this work has been successful and seems to be quite popular.

### Denver

#### THE DENVER TUBERCULOSIS SOCIETY

The Denver Tuberculosis Society is this year celebrating the tenth anniversary of its organization in 1917, and is planning to issue during the year a comprehensive report of health work in Denver during the past decade. The ten-year period has seen some interesting activities undertaken in the Child Health field, and the Denver Tuberculosis Society is gratified to have had some share in most of these movements.

During the period the Society coöperated with the public schools in starting their health work, conducted demonstration nutrition classes and also two open air room classes. Last fall the two open air rooms were turned over to the school authorities. The School Health Education Department was started about five years ago, and our work was gradually discontinued. Underweight in the public schools has been reduced from about 35 per cent in 1922 to about 20 per cent in 1925-6.

Three years ago a health education demonstration program was begun by the Society in the parochial schools, where the intensive work has centered in grades one, two, and three, with some work carried on in the upper grades. Physical examinations have been given to all first grade children and to selected groups in grades two and three.

Nutrition classes have also been conducted in the parochial schools and in connection with the out-patient clinic at Children's Hospital.

In coöperation with the State Tuberculosis Association, a nutrition institute was conducted in the fall of 1922 with an attendance of about eighty teachers and nurses from all parts of the state.

Immediately after this nutrition institute, a preventorium for undernourished children was opened by the Junior League.

The Society has fostered a continuous health program in the orphanages with outstanding results at Denver Orphans' Home, where the average underweight has been reduced from nearly 30 per cent to from 2 to 5 per cent. In connection with the other orphanages the Society is coöperating in an attempt to secure a standard type of physical examination for all children entering the institution and regular follow-up work.

Studies in the health field have been made, many talks have been given, both to adults and children, and a large amount of literature has been distributed.

In the latter half of the ten-year period there have been 100 weekly health classes conducted, with an enrollment of 3,486 children; a complete physical examination has been given to 1,797 children in classes. During nine semesters 13 open air room classes were conducted, with an enrollment of 345 children.

In addition to the figures given above, thousands of children have been weighed and measured in connection with the routine of the health work.

About 200 talks have been given to children other than those in the weekly health classes.

During the year 1926, in addition to the executive secretary, the staff consisted of four nutritionists, a public health nurse who had charge of the health information service, and an office secretary.

## CONNECTICUT

### Middletown

#### DISTRICT NURSE ASSOCIATION

The most significant change in our work which took place in 1926 was the redistricting of our city, giving each nurse a district wherein she does child welfare, tuberculosis, prenatal, maternity and bedside nursing of all types.

Hitherto we had two nurses who specialized in child welfare work alone. We have appointed one of these nurses as a special supervisor so that we may be kept informed of the newer developments in child welfare work, and that any problem occurring, she would act as consultant.

### New Haven

#### VISITING NURSE ASSOCIATION

The fact that we are carrying Child Welfare Work in a generalized program makes it especially desirable to carry out a good program of staff education along Child Welfare lines. During 1926 a series of talks by Miss Washburn and Miss Lord of the Yale Psycho-Clinic was completed. Mental hygiene of preschool child, mother's guidance regarding hygiene and habit training, and behavior problems were the subjects discussed.

Doctor Ethel Dunham, pediatrician of the New Haven Dispensary, lectured on Tuberculosis in Infants and Preschool Children. Doctor Morton S. Loeb, doctor of dentistry, gave a series of three lectures, one of which concerned the

formation of the teeth and the prenatal influence of the mother's diet and general hygiene during pregnancy. Doctor Phipps of Kansas City, Missouri, spoke on milk as the most important item in the nutrition of young children.

During the year mothers' groups were addressed in a series of six lectures by Doctor Thompson of the Connecticut Mental Hygiene Association. Thirty mothers attended this series throughout. Miss Marie Nelson, the dietitian of the Visiting Nurse Association, began a consultant service at one of our prenatal clinics. This has brought excellent results.

The Junior League of New Haven set up a prenatal clinic staffed by the visiting nurses, a dispensary physician, and Junior League volunteers.

The Child Welfare Conference physicians and nurses, with Doctor Linde as chairman, held meetings every two months for the discussion of conference problems. Papers were presented upon the following subjects:

1. Vitamin B in Stimulating Appetite.
2. Ocular Disturbances Which Are Found in Childhood.
3. Review of Infant Feeding. *American Journal of Diseases of Children*, November, 1925.
4. Excursion—Children's Community Center.
5. Care and Feeding of Premature Babies.
6. Posture.

## DELAWARE

### STATE BOARD OF HEALTH, DIVISION OF CHILD HYGIENE, DOVER

During 1926 the services of a full-time director and clerk in the Department of Child Hygiene were secured. Itinerant Conferences were added to the program and 55 such conferences were conducted from June 15 to September 1. At these conferences 1,012 babies were weighed, measured and examined; special instructions in the care and diet of babies were given to approximately 700 mothers. These conferences were conducted in the small rural communities where there are no regular Health Centers.

New pamphlets were published pertaining to the following subjects: Diphtheria, Diarrhea and Enteritis, and Diseases of Children. A Baby Book, Diet Cards, Prenatal Letters and Patterns were published. Addressed post cards were sent to the physicians for reporting prenatal cases. Our nurses also included new prenatal cases on their daily report sheets.

The Toxin-Antitoxin Campaign was conducted through May, October, November and December; 7,500 preschool and school children received the treatments.

Our publicity program has increased. Talks on Child Health subjects were given and moving pictures were shown at 64 various organizations, schools, etc. There were 36,000 pieces of literature sent out, 104 newspaper articles on Child Health were published, and 10 articles were published in the *Delaware Health News*. New record cards for nurses' daily reports, itinerant conferences, toxin-

antitoxin inoculations, and maternity and infancy reports were printed. Papers on Child Health work were read before each of three county Medical Society meetings, also the State Medical Society.

Child Health work was discussed privately with 57 physicians and 24 school superintendents. Circular letters were sent to all physicians, clergymen, grange masters, presidents of Parent-Teacher Associations, and school superintendents.

We were pleased with the increased interest and coöperation shown in Public Health work among the physicians and laity.

## DISTRICT OF COLUMBIA

### Washington

#### AMERICAN FEDERATION OF ORGANIZATIONS FOR THE HARD OF HEARING

In 1926 the country was arbitrarily divided into four zones with four vice-presidents acting as our president's representatives in this zone. These vice-presidents keep in touch with the local organizations by personal visits and by letters, and strive to arouse interest in the hard of hearing child in the public schools, to form new organizations in cities where none exist, and to give information about the Federation and its work.

The first Lip-Reading Tournament ever held in the United States, or in the world, was held under the auspices of the Federation in Philadelphia last June.

## ILLINOIS

### Chicago

#### ELIZABETH McCORMICK MEMORIAL FUND

The Fund was established in 1908, the object being to improve the condition of child life in the United States. It is supported by a private endowment. Its activities are the promotion and standardization of open air schools; nutrition work; health work in schools; education of parents in the care of children; research work; work with the preschool child; child welfare library service; coöperation with social agencies and institutions in establishing standards for the physical care and welfare of children.

#### INFANT WELFARE SOCIETY OF CHICAGO

Since October, 1925, a psychiatric social worker has been a member of the staff of the Infant Welfare Society. Her activity has been to advise staff nurses and dietitians concerning behavior difficulties, to seek special clinic service when that is indicated, and to supervise the carrying out of treatment prescribed.

### Freeport

#### AMITY SOCIETY CHILD WELFARE STATION

Through the splendid coöperation of the local Rotary Club, the Amity



Society has been able to establish a Brace Fund to aid the crippled children of the poor in obtaining braces.

The Society has also established Well Baby Conferences exclusively for negro infants and preschool age children, clinics for white infants having been maintained for years.

## INDIANA

### Indianapolis

#### PUBLIC HEALTH NURSING ASSOCIATION

The changes in our work include more intensified maternity service, secured by extending this service to include a nurse present at the time of delivery to a limited number of patients who pay for the service. We have also carried on additional work with the crippled and defective children in their homes and extension of this service to include the adult handicapped also.

## IOWA

### Des Moines

#### IOWA TUBERCULOSIS ASSOCIATION

New developments in 1926 in the work of the Iowa Tuberculosis Association, which is really a state public health association, include the following:

Continuation of the expanded program on heart disease. The Iowa Heart Association was organized in May, 1926, with the directorate interlocking that of the Iowa Tuberculosis Association. It uses the machinery and staff of the latter association. The work is financed from Christmas seal funds. One feature was the so-called county chest clinic, which is a combination of tuberculosis and heart examinations. These clinics have been held in 27 counties.

Various other forms of heart work, principally of an educational nature, were carried on.

A special committee was appointed to consider teacher training courses for health education offered by the colleges and normal training schools of the state in compliance with the physical education law. This is a committee on the State Teachers' Association, but is headed by Miss Edith Countryman of the Iowa Tuberculosis Association.

The Iowa Tuberculosis Association is paying the salary of the acting director of the public health nurse of the State Department of Health. The State Department has also put on a director of nursing education.

Iowa schools again won more Modern Health Crusade pennants, and the interstate cup awarded for the largest number of Crusaders who have continued the work over a period of four years was again captured by this state.

The State Association has on its staff a director of occupational therapy who supervises this work at the State Sanatorium and at two county sanatoria.

Among the new literature produced was a Junior Health Habit Wall Chart and Manual, which has proven very popular for health teaching in kindergarten and first grades.

Other regular features of the work of the Association carried on as usual include field service, organization, various speeches, promotion of local programs, clinics, demonstration nursing, placement of nurses, supervision of public health nurses, Modern Health Crusade and other health education work, teachers institute and study center work, legislation, distribution of literature, publicity, Christmas seal sale.

## MAINE

### Portland

#### PORTLAND BABY HYGIENE AND CHILD WELFARE ASSOCIATION

The Catherine Morrell Day Nursery of Portland, Maine, on January, 1, 1927, finished a very successful year. The aggregate attendance was 9,489 children. Our work has been carried on in coöperation with the Overseers of the Poor, Associated Charities, Family Welfare Society, Children's Protective Society, American Red Cross, Hospital Social Workers, physicians and churches of our own city. Many out-of-town agencies also have referred cases to us.

A number of the children who were with us at the beginning of our work more than four years ago are now in high school and show their friendliness for the nursery by offering their help outside of school hours.

Special attention has been given to nutrition. At present only two of our daily average of 45 children are under weight. These two have been with us only a short time and are showing a gain each week.

Under the supervision of Doctor Allen Sylvester, cod liver oil is given daily, and all throats are gargled or sprayed each morning. This treatment has resulted in a decrease in the respiratory troubles so prevalent during the winter.

In 1924 the Kiwanians started a trust fund for our people. This has been loaned for medicine, glasses, food, fuel, rent, clothing, and many emergencies. The loans have always been repaid. Sometimes the amounts it is returned in are very small, perhaps not more than 25 cents each week. This money is never used where the need is to be continuous. Cases of this kind are sent to the Overseers of the Poor. Where conditions are such that it would seem unfair to saddle the family with a large debt to be paid from a very small income, they are advised to go to the Family Welfare Society instead of borrowing.

## MARYLAND

### Baltimore

#### CITY DEPARTMENT OF HEALTH, BUREAU OF CHILD WELFARE

In accordance with a resolution passed at a meeting of the Babies' Milk Fund Association held on January 20, 1926, a plan for the partial fusion of the

nursing forces of the Bureau of Child Welfare and the Babies' Milk Fund Association was formulated by the Committee on a Unified Child Welfare Program. This committee consisted of members of both organizations. The final plan was approved by the committee on April 12, 1926, and was later approved by the Babies' Milk Fund Association. The first actual step in placing the plan in operation was begun on May 1, 1926, when two nurses of the Babies' Milk Fund Association took over all the child welfare work in wards 2 and 3. At the same time the nurse of the Bureau of Child Welfare formerly assigned to this area was removed in order to do more concentrated work in other sections.

On May 18, 1926, the Board of Estimates approved an appropriation for an increase in the Prenatal and Obstetrical Service of the Bureau of Child Welfare. The appropriation provided for an increase in the obstetrical staff from three to five assistant obstetricians (fourth year medical students), and from three to five obstetrical nurses. It also provided for the rental of a house as an obstetrical sub-center for the Westport area. This sub-center was opened on July 9, 1926. This clinic furnishes an obstetrical service for residents of Westport, Mt. Winans, and Morrell Park. Before the end of the year 1926 the appointments of two assistant obstetricians and two obstetrical nurses were made to fill the positions created by the Board of Estimates.

On November 13, 1926, the Welfare Center which had been located since its opening in 1921 at 1702 Westwood Avenue was moved to 1516 Madison Avenue after the latter property had been purchased by the city. It is planned to transfer the Wednesday afternoon colored obstetrical clinic now held at 2547 Pennsylvania Avenue to 1516 Madison Avenue as soon as the necessary arrangements can be made.

## MASSACHUSETTS

### STATE DEPARTMENT OF HEALTH, DIVISION OF HYGIENE, BOSTON

The outstanding change in the child hygiene work of the Massachusetts Department of Public Health during the year 1926 was the adoption of a new policy on dental hygiene. This policy was adopted after consultation with a special Advisory Committee of all the important dental societies in the state. Its salient points are as follows:

1. Communities now conducting dental hygiene clinics are urged to limit their work to the early grades in school and to include work for the preschool child and for the prospective mother.

2. The importance of filling pits and fissures in both deciduous and permanent teeth is stressed.

3. Municipalities not carrying on dental clinics through the employment of municipal funds are urgently advised not to undertake this work but to rely upon private agencies, particularly dispensaries for all kinds of operative work.

It is urged that municipal funds be spent only for strictly educational work carried on through a dental hygienist.

4. The State Department of Public Health offers to local communities advice of a Consultant in Dental Hygiene with regard to programs; educational material, including printed leaflets, posters, models and exhibits, has been compiled for the use of local communities. It does not conduct clinics of any kind excepting as dental hygiene is stressed in its Well-Child Demonstration Conferences.

### **Brockton**

#### **BROCKTON VISITING NURSE ASSOCIATION**

An intensive study of the organization was made by the National Organization for Public Health Nursing and several very definite and helpful recommendations were made.

Following the study the Association employed a second full-time clerk.

Plans were completed for the addition of the second field supervisor, who was appointed from the staff to begin her new duties January 1st.

A committee was appointed from the Board of Managers for the revision of by-laws so that they might conform to the present work and ideals of the Association.

More definite plans were made for staff education and every effort has been made to improve the content of the home visit. Forty-two books have been added to the nurses' library.

The average number of nurses employed was about seventeen.

### **Falmouth**

#### **THE FALMOUTH NURSING ASSOCIATION**

The most significant change in the work of the Falmouth Nursing Association has come as a result of the School Department employing its own nurse, thus relieving our nurses of much routine work. Since September, 1926, we have been laying great emphasis upon the preschool child. We are holding well-child conferences each month and preschool dental clinics each week in an attempt to better the health of the preschool child. This new movement on our part seems to coincide very well with the program of Child Health which is recommended by the State Department of Health.

### **Lowell**

#### **THE LOWELL GUILD**

The chief advance the Lowell Guild has made in child health in 1926 has been in the care of the pregnant woman. Classes for pregnant women were started in March, 1926, and in July the Guild began its delivery service.

The effect of this new work has been to improve the quality of our prenatal nursing.

## Springfield

## SPRINGFIELD NURSING AND PUBLIC HEALTH ASSOCIATION

Two new features of our work in 1926 were the introduction of a complete communicable disease program in our generalized service, and the extension of public health nursing and education to all members of our community. Heretofore the middle class and poor were the only ones eligible to our service. Now we have an hourly nursing service for all who care to avail themselves of it.

## MICHIGAN

## Detroit

## VISITING NURSE ASSOCIATION

The year 1926 stands out in the history of the Association as an epoch in growth—a 33 per cent increase in patients over last year—an extension of territory to include further metropolitan area, that is, Royal Oak Township, including four towns the largest of which are Royal Oak and Ferndale. We are giving general visiting nurse service and are doing infant and preschool clinic work in this township, general visiting nursing in Fordson and Grosse Pointe. The area which we now cover is 200 square miles, with a population of 1,800,000. In November, 1926, we began doing follow-up work for the cardiac clinic of the Children's Hospital of Michigan.

Below is a copy of our comparative statistics as to patients and visits for 1925 and 1926.

## VISITING NURSE ASSOCIATION ANNUAL REPORT—1926

*Comparative Report*

	1925	1926	Per cent Increase	Per cent Decrease
New Patients				
Prenatal. . . . .	2,785	3,404	22.1	
Delivery. . . . .	1,361	1,687	23.9	
Maternity. . . . .	3,176	3,812	20.	
Newborn. . . . .	3,125	3,725	19.2	
Orthopedic (Children's Hosp. of Mich.) . . . . .	651	441	....	32.
Metropolitan Life Ins. Co. . . . .	5,812	8,139	40.	
Colored. . . . .	1,765	2,592	46.8	
Contagion . . . . .	172	196	13.9	
Child Welfare* . . . . .	1,869	2,697	44.3	
V.N.A. General Work. . . . .	13,598	17,971	32.1	
Total Patients . . . . .	15,467	20,668	33.6	
Visits. . . . .	98,703	123,616	25.2	

\* Non-clinic Child Welfare patients included this year. Last year's figure adjusted to include this group.

## Grand Rapids

## THE CLINIC FOR INFANT FEEDING

As a result of over four years spent in trying to save the lives of babies, the Clinic for Infant Feeding, in 1915, began what was pioneer work so far as Grand Rapids was concerned—a Prenatal Clinic. Since then nearly three thousand expectant mothers have received care and only seven of them have given up their lives as a result of pregnancy—or only two and a fraction deaths for every thousand mothers who lived. That is what the education of the mothers will accomplish.

Patients under supervision at our Prenatal Clinics are called on by the nurses every two weeks up to the seventh month of pregnancy and once every week thereafter taking blood pressure once a month or oftener if necessary and making a urinalysis for every call. The nurse sees that a physician is engaged or hospital arrangements made for the coming confinement, advises what will be necessary for the layette and for home confinement. She endeavors to secure for the patient freedom from worry by helping her plan her budget to provide for a systematic saving to defray the expense of the coming ordeal besides checking up on the faithfulness with which the mother is carrying out the doctor's recommendations as to diet, exercise, bathing, rest, and fresh air. She helps to dispel the needless fears that beset women in this condition, particularly if it is the first pregnancy.

Physical examinations are made by the doctors at the Clinics and anything abnormal found is reported to the private physician or to the hospital to which the patient is going. We endeavor not to take the expectant mother from her home unnecessarily or to subject her to the danger of too frequent physical examinations. The ordinary cares of home and family are often a tax on her strength and through the kindness of the Little Folks' Welfare Club—which furnishes layettes for needy mothers as well—they are brought to the Clinics. In the conduct of the Prenatal Clinic we acknowledge our debt to Charles C. Norris, M.D., of Philadelphia, whose very successful work we try to duplicate.

We hope that education of the public will result in greater demands upon our resources. In this, as in all our undertakings, we are working with the Health Department.

PRENATAL CLINIC  
*Comparative Report*

	1925	1926
Number of Patients Registered since Dec., 1915.....	2,444	2,920
<i>Number of Maternal Deaths since 1915—seven</i>		
Number of Patients Registered at Clinic this year.....	349	476
Number of Clinic Patients Registered this year (Clinic Patients are those registered before the 6th month).....	98	113
Number of Non-Clinic Patients Registered this year.....	251	363

## PRENATAL CLINIC—Continued

*Comparative Report*

	1925	1926
Total Attendance .....	414	498
Number of babies born this year.....	283	363
Number born in hospital.....	83	129
Number born at home.....	200	234
Maternal deaths .....	1	2
Infant deaths (one-half hour to two weeks).....	10	5
Mortality Rate of Prenatal Babies.....	.035	.013
Visits made by four nurses.....	4,412	5,674
Stillbirths. . . . .	5	8
Layettes furnished by Little Folks' Welfare Club.....	66	52

The Clinic for Infant Feeding advises mothers as how to keep babies and little children well. Their nurses will call and show mothers how to prepare bottle feedings, give baths, and so forth. They supply nursing service for sick babies and little children, including measles patients, helping mothers to carry out the doctor's orders.

Since 1921 the Clinic Nurses, at the request of the Health Department, have called monthly for a year on every baby born in the city except those born in Blodgett Memorial Hospital. This is to encourage mothers in the breast-feeding of their infants and to persuade them to send any excess milk to the Clinic for the sick and premature babies of the city. One hundred and twenty-three babies were supplied with 53,641 ounces of mothers' milk in 1926.

## — 1926 —

Number of babies under 2 years of age at Clinic Stations....	2,265
Their visits to Clinic totaled.....	13,847
Midwife cases (of these 7 became Clinic Babies).....	61
Preschool children (Clinic).....	1,846
Preschool children (Non-Clinic).....	2,298
Nutrition children (Clinic).....	98
Nutrition children (Non-Clinic).....	81

*Classification of Ages*

	Non-Clinic	Clinic
Under 3 months.....	4,366	956
3 mos. to 1 year.....	2,293	823
1 to 2 years.....	1,890	486
2 years to school age.....	4,323	1,944
Total.....	12,872	4,209

## MINNESOTA

STATE DEPARTMENT OF HEALTH, DIVISION OF CHILD HEALTH,  
MINNEAPOLIS

The chief new project undertaken by the Division of Child Hygiene during the year 1926 has been the organization of Mothers' Classes. These classes are organized through Farm Bureau Clubs or other organizations in the county by the field nurses of the Division of Child Hygiene. A series of eight lessons is given, divided into two parts. The first four lessons cover the subject of Maternal Hygiene, the last four the Care and Feeding of the Young Child. During 1926, 54 of these classes were conducted with an enrollment of 678 mothers.

## MISSOURI

## Kansas City

## VISITING NURSE ASSOCIATION

We have made no very great changes in our work during the last year except in two services. In our prenatal work we have put on a special nurse who devotes her entire time to prenatal cases, whereas, heretofore the prenatal cases have been carried by the general district nurses. We feel that this method is very much more satisfactory than the old one. We have also established a service for the after-care of infantile paralysis cases to which we have assigned two nurses who work under the careful direction of a trained physiotherapist and the guidance of one of our orthopedists. The greater part of this work is done in the home by the nurses who teach the mothers proper exercises and muscle training to stimulate the action of the muscles.

In the short period that we have been doing this work we have had satisfactory results and feel that we have been able to avoid many deformities.

We are planning to send one of our nurses to take the summer course in physiotherapy which is given in the Harvard Medical School.

## NEBRASKA

## Omaha

## THE VISITING NURSE ASSOCIATION

The delivery service was discontinued in July, 1926, the Nurse's Official Registry having organized a delivery service for the patient able to pay. The outpatient service of one medical school is giving the prenatal and delivery service in the home to patients attending their clinics. Until this year the Visiting Nurse Association was the only organization giving prenatal and delivery service.

A specialized contagious service was introduced in July, 1926.

The total budget amounted to \$58,142.79, and of this \$11,980.29 was met



by fees from patients. Contagious disease work is supported by an appropriation from the city.

*General statement:* During the year 61,138 visits were made by nurses; 9,215 patients were given care. During the year 1,181 patients received prenatal care; 144 patients were attended at the time of delivery; 2,335 babies were registered at the Infant Welfare conferences with an attendance of 8,076.

## NEW HAMPSHIRE

### Manchester

#### CITY HEALTH DEPARTMENT, INFANT WELFARE DEPARTMENT

In 1926 there was a marked drop in deaths from tuberculosis, forms other than pulmonary, in children under three years of age. In 1926 there were two deaths in this age group. In 1925 six deaths, in 1924 ten deaths. November 1, 1924, a new milk ordinance requiring either pasteurization or tuberculin testing of cattle became effective. This drop in deaths from tuberculosis other than pulmonary may be only a coincidence but the drop does appear significant.

## NEW JERSEY

### Orange

#### DIET KITCHEN OF THE ORANGES

With the exception of the Infant Mortality rate our Organization gained the rating score in each of its Child Welfare activities as formulated by the American Public Health Association and the American Child Health Association. We also have adopted the Appraisal Form whereby children up to one year of age are classified as infants, the older ones grouped as preschool children.

The one new activity of the year was the summer round-up of the preschool child, or, as we termed him, the "Blue Ribbon Child." As you know the aim of this summer round-up is to send to school in the first grade a class free as possible from those handicaps which cause absences from school in the most important opening months of the term or the inability of the child to do the work required.

We offered a "Blue Ribbon" to the normal child and to every child who would have all remedial defects corrected and up to normal weight by September 1.

A complete health record of each child was forwarded to the school authorities covering the period from the time he first came under our supervision to the day he entered school.

## NEW YORK

## Jamestown

## JAMESTOWN VISITING NURSE ASSOCIATION

We did not hold our annual Child Improvement contest last May, due to a Preschool program being carried on by the Parent-Teachers Association at that time. We lent our efforts and coöperation.

In October we devoted one week to educational health work by stressing it with posters, a food exhibit, and daily talks on prenatal, infant and pre-school work.

## New York City

## AMERICAN NURSES' ASSOCIATION

In an effort to work toward the solution of the problem of getting nursing service for the public at a price the patient of average means can afford and at a rate which the nurse can afford to live on, a study of hourly nursing as carried on by official registries for nurses in the United States was started at the Headquarters office of the American Nurses' Association. Increasing emphasis is to be placed on the readjustment which must be made between the profession and the public to meet modern economic conditions.

The organization is one of seven associations participating in the five-year program which is now being carried on by the Committee on Grading of Nursing Schools. The facts which will grow out of this study are expected to be of tremendous benefit to both the public and the nursing profession. The plan provides for the grading of approximately 2,000 schools of nursing in the United States.

With the two other national nursing organizations, we had a nursing exhibit at the Sesqui-Centennial at Philadelphia. Educational literature on nursing was distributed by the director in charge. The exhibit showed the different stages in the education of a nurse and the various phases in the work of a nurse after graduation.

Our membership in 1926 grew from 50,605 to 54,441. The American Nurses' Relief Fund which is for the relief of nurses who are ill and without funds increased from \$119,446.52 to \$131,998.29. The number of beneficiaries under this fund grew from 79 to 134.

## CHILD STUDY ASSOCIATION OF AMERICA

A conference which was held in Baltimore on November 30th and December 1st. One day was given to a conference and one day to a demonstration of study group work.

Publications during the past year included: "Guidance of Childhood and Youth," "Concerning Parents," "Music for Children," "Books for Young Readers," "Child Study Groups: A Manual for Leaders," "Supplement to a Selected List of Books for Parents and Teachers, 1925."

An institute was held in the Hotel Majestic and in the Headquarters of the Association, 54 West 74th Street, New York City, from January 17th to January 28th.

#### CHILDREN'S WELFARE FEDERATION

The Children's Welfare Federation reports for the year 1926 that 442 individuals have represented 341 organizations on the functional committees of the Federation, which have met for conferences and active committee work.

The Clearing House for Maternity Cases has registered and assigned out for nursing care 36,271 mothers and babies; in addition to sending out over 4,000 notices to prevent duplication of work.

The Clearing House for Children's Cases has had referred for placement in temporary shelters, convalescent homes, hospitals, day nurseries, etc., 5,118 children.

The Bureau for Collection and Sale of Mothers' Milk has collected 1,758 quarts of mothers' milk supplied by 98 mothers. This has been given to 274 premature and ailing babies and to 36 hospitals.

The Bureau on Supplies has distributed 33 different kinds of literatures, over 1,000 orders from organizations having been received during the year.

The Information Bureau published a directory on Convalescent and Fresh Air Homes for distribution in late spring, giving up-to-date information on all summer plans.

A survey of vacation homes and camps was carried on again during July and August under the direction of our Committee on Convalescent and Fresh Air Care and definite action was taken at the first fall meeting of this group that the Federation should be asked to appoint a Grading Committee to study and grade all vacation homes and camps during the season of 1927.

A new service was developed to provide convalescent care for children discharged from our contagious hospitals. After conferences called by our Committee on Health Stations and the Committee on Preschool Clinics and Nutritional Classes, a plan was decided on. All cases are reported to Children's Welfare Federation on yellow transfer slips and from there assigned out to nurses under private agencies or the Department of Health according to age of child or neighborhood for continuous health supervision.

#### GREENWICH HOUSE

Our health work consists of community education by holding conferences, classes and clinics for children before birth up to school age, then having periodical health examinations for children before going to the country and those who have not already had it that year in school.

Periodical examinations for young men and women who attend our clubs are given monthly. Mental hygiene program for all those in need of such service, therefore coöperating very closely with schools and other organizations.

Special nutrition program particularly for preschool children with some emphasis on the little mother in special class work.

With the aid of the City Health Department a great effort has been made during the summer months and fall to immunize all children against diphtheria.

We are always stressing a cleaner and healthier neighborhood and when in certain sections where disease is more prevalent, a survey is made. We are now making a survey in one of our sanitary areas with the aid of one of the college groups.

#### HENRY STREET VISITING NURSE SERVICE

During the year 1926, 356,056 visits were made by the nurses; 56,230 patients were under care; 1,556 conference sessions were held with an attendance of 19,885 persons. The conference and class activities during the year included prenatal conferences in six of the centers; preschool conferences in six centers; mothers' clubs in seven centers; and baby welfare conferences in five centers.

During 1926 the educational program for the visiting nurse staff was united in a central teaching center at the administration building. Through the coöperation of other social agencies in the city, a nutrition program and a mental hygiene program are becoming an important part of our activities in the public health field.

#### NEW YORK ASSOCIATION FOR IMPROVING THE CONDITION OF THE POOR

The main objective of the manifold activities of the Association, more especially of the later years of its eighty-three, is conservation of homes—homes broken, or threatened, by poverty, illness, or other destructive distress.

During its last fiscal year the Association aided over 6,500 families in their struggle to maintain their homes, with money, often in the form of regular monthly allowances carefully budgeted, with food, clothing, health service, friendly counsel. Vocational guidance for the children of these families is now a regular part of the Association's program.

Building of both character and bodies is stressed in the homes and camps where mothers, babies, old people, and boys and girls of all ages are given vacation rest and good times and convalescent care. A generous gift from the Robert Boyd Ward Fund has made possible gratifying enlargement and higher standards of country care for convalescents and aged.

This gift, together with a definite policy of keeping in their own tiny homes elderly men and women unable to earn the full amount of their humble living, marks a step ahead in present day care of our dependent aged.

These and kindred activities are conducted through a Department of Family Welfare. The Department of Social Welfare places its first emphasis on preventive measures. Through research work, by supplementing the efforts of public agencies, by conducting demonstrations with a view to determining the

best ways of meeting the needs of the community, and through general health education and propaganda, it aims to have part in enlarging opportunity of health and fulness of life to all.

To the carrying on of this work 10,758 contributors gave funds totaling, for the last fiscal year of this Association, \$818,190.71.

#### STATE CHARITIES AID ASSOCIATION, STATE COMMITTEE ON TUBERCULOSIS AND PUBLIC HEALTH, AND THE DEPARTMENT OF COUNTY CHILDREN'S AGENCIES

The State Charities Aid Association was organized in 1872 to improve the condition of public charitable institutions and hospitals and to promote public welfare.

Its Committee on Tuberculosis and Public Health was created in 1907. It carries on a number of child health activities in conjunction with its tuberculosis and general health services as follows: (a) general health education and publicity, (b) promotion of health teaching in the schools, (c) promotion of children's health camps, (d) promotion of adequate hospital and preventorium facilities for the care of children, (e) promotion of additional public health nursing service, (f) coöperation with the State Department of Health in the establishment and operation of Child Health Consultation Clinics, and (g) participation in an intensive five-year Diphtheria Eradication Campaign.

The Committee consists of 93 members and is the parent organization of 58 local committees on tuberculosis and public health. Its field of work is the State of New York, exclusive of New York City. It is financed partly through the sale of Christmas seals. The budget for its general program for 1927 amounts to \$60,000; a special contribution of \$15,000 finances the State Committee's part in the Diphtheria Eradication Campaign.

By appointment of the Milbank Memorial Fund, the State Committee is also the general organizing and supervising agency for health demonstrations that are being carried on in Cattaraugus County and Syracuse, with the advice and assistance of the Milbank Memorial Fund. In both of these demonstrations intensive child health work is being done.

#### Rochester

##### TUBERCULOSIS AND HEALTH ASSOCIATION OF ROCHESTER AND MONROE COUNTY

A special coöperative program is being undertaken with the Board of Education in studying the relation of ventilation to the health of school children. In the county, health examinations are provided for high school juniors and seniors. A news bulletin service is supplied periodically to all teachers in city and county schools.

*Expenditures for Child Health*—Out of a total budget of \$40,000, one-fifth, or \$8,000, is devoted to child health through direct service and educational activities. A campaign is being conducted to urge parents to see to it that their

children are protected against diphtheria through the use of toxin-antitoxin. This is sponsored by the County Medical Society, and extra expense for clinic supplies is being met by that Society.

## OHIO

### Cincinnati

#### THE BABIES' MILK FUND ASSOCIATION

The changes in our work include: first, the installation of an Alpine sun lamp for quartz light therapy in the study, prevention and treatment of rickets, and second, the stressing of prenatal work which greatly increased the size of our prenatal clinics and classes.

#### PUBLIC HEALTH FEDERATION

During the last year the Council brought about a coördination between the Cincinnati Federation of Mothers' Clubs and the Department of Health on the project of the Summer Round-Up.

A committee of the Child Hygiene Council made a study of infant mortality in Cincinnati in 1925. A report of this study will be published soon.

· Made a study of facilities for tonsillectomies in Cincinnati.

Coöperated with other agencies in the observance of Child Health Day, distributing 10,000 copies of a special child health and safety leaflet.

This year the Section has resolved itself into a mothers' training class and is receiving the lectures arranged by Doctor Ada Arlitt of the University of Cincinnati on The Training of Children of the Preschool Age.

## OKLAHOMA

### Tulsa

#### TULSA COUNTY PUBLIC HEALTH ASSOCIATION

In the last year our clinics have increased possibly one-third in attendance. We are also stressing the administration of toxin-antitoxin for all preschool children, and are just beginning a county wide campaign for its administration, the funds for this having been specially donated.

## OREGON

#### OREGON STATE BOARD OF HEALTH, BUREAU OF PUBLIC HEALTH NURSING AND CHILD HYGIENE, PORTLAND

In our full-time units which are partly subsidized by Sheppard-Towner funds, a rather intensive immunization program has been carried on both for school and preschool children. Dental surveys have also been successful in two of these units.

During the past year we have coöperated with the Marion County Child

Health Demonstration by subsidizing a part-time nurse on their staff in a Maternity and Infancy program. The University of Oregon Medical School has taken over part of the expense of the prenatal supervisor formerly financed by this department. This prenatal supervisor has charge of four prenatal clinics which serve as a teaching center for the medical students of the University.

## PENNSYLVANIA

### Philadelphia

#### THE BABIES' HOSPITAL OF PHILADELPHIA

The most interesting new piece of work which we did during the year 1926 was the establishment of a Nursery School Nutrition Work for the purpose of taking care of our most badly nourished children. The work was run through the summer months during 1926, and during 1927 will be run during the entire year. It was a very satisfactory experiment, the children improving in every possible way.

#### ST. CHRISTOPHER'S HOSPITAL FOR CHILDREN

A Heart Class was organized in October, 1926, by A. H. Boyer Drake, M.D., Assistant Cardiologist, as part of the Department of Preventive Medicine and under the supervision of the Cardiac Department. The class is run on a club basis with a president and secretary. Its purpose is purely educational. Patients who need to see the Cardiologist not more than once a month are referred to the class which is held every Tuesday. The children are weighed, general health rules are discussed, health story read, and simple exercises are given for a ten-minute period.

Home Care of Heart Patients. Heart patients needing bed care as a preventive measure are put to bed at home under the supervision of the Visiting Nurse Society and John C. Williams, M.D., Assistant Cardiologist. Our heart worker carries the family actively, the Visiting Nurse giving expert nursing care to the patient only. A report of the patient is sent in by the nurse once a week on clinic day. If she thinks the patient is not well enough to come to the clinic at the time specified by the Cardiologist, Doctor Williams visits the home and arranges for admission to the heart ward if he deems it necessary.

The University Health Club for Boys. Organized by Doctor Drake under the Department of Preventive Medicine. This club consists of 16 boys, 10 to 14 years of age, who attended the University Camp last summer. During the winter they attend club meeting the third Friday of each month. They are weighed, examined by the doctor individually, health rules and general conduct discussed. The most important feature of this work is the splendid contact between a young, understanding medical man and a group of adolescent boys.

Child Study Clinic. A Child Study Clinic under the leadership of Doctor James Waygood, Doctor Esther K. Rosen and Miss Fannie E. Teller was

organized where the child with his many problems can learn to understand himself and where the parents can have training in the disciplining and guiding of their children. All appointments for this clinic are made through the psychiatric worker, who refers the child to the Well Clinic for a thorough physical examination, secured background, environmental and school history. The worker who is handling the family discusses the problem with the psychiatric worker; the patient is then referred to the psychologist for a mental test and personality study. He is later brought to see the psychiatrist, who has at his command the knowledge necessary to a clear understanding of the problems and difficulties of the child, his family and his school. After the psychiatrist has seen the child and his parents there is a conference held which includes the psychiatrist, the psychologist, the psychiatric worker and the worker handling the family.

#### THE WHITE-WILLIAMS FOUNDATION

The year of 1926 has been one of self-study and of reorganization. As a five-year period of counseling was being discontinued in a primary, a grade and a junior high school, it seemed an opportune time to study the work which had been done. A statistician was engaged for two months in the summer to get from the statistical cards figures which might give some idea of the quantity of work done, facts about the children, etc. Each counselor then interpreted the figures and tried to give a picture of the neighborhood and the children to whom help was given. These reports have not been published, as they were for the purpose of improving the work of the Foundation, but they are on file for those who are interested.

Work in the Girls' Trade School was also given up by the Foundation. The counselor passed the examination for employment supervisor and continued her work at the Trade School under the Board of Public Education.

Through the generosity of the Keith Fund, full-time fellowships were awarded to junior high school teachers last summer, and when school began in September consultation with them was continued by the former White-Williams junior high school counselor.

The counselor who had been in a primary school, at the invitation of the Associate Superintendent in charge of Elementary Schools and of the Principal of the Normal School, became the counselor in a school of practice. It is our hope to develop, in coöperation with the Sociology Department of the Normal School, a plan whereby senior normal students may be offered a limited field work experience with counselors in schools of practice. The object of such a plan would be to develop a better understanding of the individual problems which interfere with school progress.

The other schools chosen for the counseling demonstration were a grade school in an American neighborhood and one in a foreign neighborhood, which had special problems.



## Reading

## VISITING NURSE ASSOCIATION

In the past year we have opened more Baby Welfare Centers, having ten in the city and four in the rural section within a radius of ten miles from city. Five more in branch organizations, which were organized in 1926, make a total of nineteen Baby Welfare Centers in Reading and Berks County.

## RHODE ISLAND

STATE DEPARTMENT OF HEALTH, DIVISION OF CHILD WELFARE,  
PROVIDENCE

The only new work is the midwife inspections. The new publications during the year were a folder on "Rickets" and a new poster, "Runabout's Daily Program," and a "Survey of the Stillbirths and Neonatal Deaths in Woonsocket, R. I., in 1925."

While this does not seem a great deal different from previous reports, there was really an increase of 12,669 home contacts, which represents a very real increase in the work of the division.

## Providence

## CITY HEALTH DEPARTMENT, CHILD HYGIENE DIVISION

There has been but one significant change during the year 1926 in the work of the Child Hygiene Division of the Providence Health Department. The health supervision of public school children has, in accordance with the recommendations made by the Strayer Survey, been turned over to the Providence School Committee, which committee has appointed a Director of Health and Physical Education to carry out the program.

With this change the Division of Child Hygiene has begun on a more intensive program for the health supervision of the parochial schools of the city, which will be reported upon in the year 1927.

Coöperating with the Providence Child Welfare Committee, a preschool clinic has been opened at the Lyra Brown Nickerson House, which is slowly but steadily gaining in patronage.

One additional child welfare nurse has been added to the staff, and with this addition these nurses have been able to increase their visits to the children between one and two years of age and have been able to take in groups many such young children to the diphtheria immunization clinics for the toxin-antitoxin treatment.

## PROVIDENCE CHILD WELFARE COMMITTEE

There has been no change in the work of the Providence Child Welfare Committee this past year, with the exception that a preschool conference has been opened in the Lyra Brown House. At this conference the attendance of children between two and six years of age is slowly but steadily increasing. Practically all the children are given toxin-antitoxin treatment for diphtheria

immunization and all the children are referred for preventive work to the dental clinic conducted at the Lyra Brown Nickerson House.

#### PROVIDENCE DISTRICT NURSING ASSOCIATION

Two significant changes have taken place in the work with children in the Providence District Nursing Association during the year 1926.

All the school children from the first four grades of the public schools have received the tuberculin test, and the reactors have been separated from the non-reactors, the former being taken on by the nurses for regular follow-up work. Those among the non-reactors seeming below par or showing suspicious symptoms are visited quarterly. During the coming year this work is to be carried into the parochial schools. Their work is being carried on in coöperation with the Providence Tuberculosis League.

It was arranged that a complete delivery service be offered to the entire city, in addition to the prenatal, post-natal, and child welfare service already in existence. These services are offered on a cost basis, a sliding financial scale, or free, according to the means of the patient. Hitherto a delivery service has been available only to patients able to pay full cost price. This new service became available on February 1, 1927.

Work among preschool children is increasing but too slowly, owing to lack of funds to secure adequate personnel.

## TENNESSEE

### Nashville

#### DEPARTMENT OF NURSING EDUCATION, GEORGE PEABODY COLLEGE FOR TEACHERS

A school health service has been instituted during the past calendar year in Peabody Demonstration School of Peabody College. The purpose is to demonstrate to student teachers the building of a health service which shall gradually coördinate all the forces within the school around some common objective in health developed by experimental methods. An outstanding problem is to incorporate health into the existing program in such a way as not to conflict with the present objectives or methods and to make use of daily activities of children for the inculcation of five attitudes toward health habits. The program aims to concentrate upon (1) a beautiful environment, (2) practices which will meet the criticism of the group itself from the standpoint of accepted health principles, (3) daily activities of pupils at school and in the home, (4) associations found in the daily program of studies, (5) a health consciousness on the part of the teaching staff—to be developed through the above factors.

A definite attempt is being made to carry parents with the program, step by step, through an educational program with parent groups.

No special health services are being developed in this program except as they are needed to contribute to the health objective of the school.

The following agencies listed in the Transactions for 1926 report no important changes:

Berkeley Health Center Berkeley, California	Wichita Public Health Nursing Association Wichita, Kansas
Mothers' Educational Center Association Los Angeles, California	State Board of Health, Bureau of Maternal and Child Health Louisville, Kentucky
Alameda County Tuberculosis Association Oakland, California	Public Health Nursing Association Louisville, Kentucky
Santa Barbara Visiting Nurse Association Santa Barbara, California	Child Welfare Association New Orleans, Louisiana
Department of Public Welfare, Social Service Division and Medical Social Service Division Bridgeport, Connecticut	*The Babies' Milk Fund Association Baltimore, Maryland
Visiting Nurse Association of Bridgeport Bridgeport, Connecticut	Jewish Children's Bureau Baltimore, Maryland
Report of the Day Nursery, Union for Home Work Hartford, Connecticut	The Boston Floating Hospital Boston, Massachusetts
The Crippled Children's Aid Society New Haven, Connecticut	Boston School of Physical Education Boston, Massachusetts
Visiting Nurse Association Stamford, Connecticut	Community Health Association Boston, Massachusetts
Waterbury Visiting Nurse Association Waterbury, Connecticut	Forsyth Dental Infirmary for Children Boston, Massachusetts
American Dental Association, Department of Dental Health Education Chicago, Illinois	The Sunnyside Day Nursery Boston, Massachusetts
Chicago Lying-in Hospital and Dispensary Chicago, Illinois	Maternal and Child Welfare Commission Fall River, Massachusetts
Hygienic Institute for La Salle, Peru and Oglesby La Salle, Illinois	Visiting Nurse Association of Fitchburg Fitchburg, Massachusetts
City Health Department, Bureau of Child Hygiene Springfield, Illinois	The Great Barrington Visiting Nurse Association Great Barrington, Massachusetts
Huntington County Tuberculosis Association Huntington, Indiana	Child Welfare Commission Holyoke, Massachusetts
City Board of Health, Child Hygiene Division Indianapolis, Indiana	Instructive Nursing Association New Bedford, Massachusetts
	Newburyport Health Center Newburyport, Massachusetts
	Michigan Department of Health, Bureau of Child Hygiene and Public Health Nursing Lansing, Michigan

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\* See page 313.

- Merrill-Palmer School  
 Detroit, Michigan  
 Visiting Nurse Association of Detroit  
 Detroit, Michigan  
 Infant Welfare Society of Minneapolis  
 Minneapolis, Minnesota  
 Visiting Nurse Association  
 Minneapolis, Minnesota  
 Department of Education, Bureau of  
 Schools, Division of Hygiene  
 St. Paul, Minnesota  
 State Board of Health, Maternal and  
 Infant Hygiene Division, Bureau  
 of Public Health Nursing and Child  
 Hygiene  
 Jackson, Mississippi  
 Thomas H. Swope Settlement  
 Kansas City, Missouri  
 Missouri State Nurses Association  
 St. Louis, Missouri  
 Missouri Tuberculosis Association  
 St. Louis, Missouri  
 St. Louis Children's Aid Society  
 St. Louis, Missouri  
 Visiting Nurse Association  
 St. Louis, Missouri  
 Child Federation of Atlantic City  
 Atlantic City, New Jersey  
 The Society of the Babies' Hospital  
 Newark, New Jersey  
 City Department of Health, Division  
 of Child Hygiene  
 Passaic, New Jersey  
 State Department of Health, Division  
 of Maternity, Infancy and Child  
 Hygiene  
 Albany, New York  
 Infant Welfare Association  
 Batavia, New York  
 Visiting Nurse Association of Brooklyn  
 Brooklyn, New York  
 District Nursing Association  
 Buffalo, New York  
 Department of Hygiene and Preventive  
 Medicine, Cornell University  
 Ithaca, New York  
 The Babies Hospital of the City of  
 New York  
 New York City, New York  
 East Harlem Nursing and Health  
 Demonstration  
 New York City, New York  
 Jewish Board of Guardians  
 New York City, New York  
 John E. Berwind Free Maternity Clinic  
 New York City, New York  
 Judson Health Center  
 New York City, New York  
 Maternity Center Association  
 New York City, New York  
 National Child Welfare Association  
 New York City, New York  
 National Council, Y.M.C.A. Boys'  
 Work Division  
 New York City, New York  
 New York Nursery and Child's Hos-  
 pital  
 New York City, New York  
 New York Tuberculosis and Health  
 Association  
 New York City, New York  
 Child Health Committee  
 Syracuse, New York  
 Department of Health, Bureau of Child  
 Hygiene and Bureau of Public  
 Health Nursing  
 Syracuse, New York  
 The Baby Welfare Committee  
 Utica, New York  
 State Board of Health, Bureau of  
 Maternity and Infancy  
 Raleigh, North Carolina  
 Cincinnati Anti-Tuberculosis League  
 Cincinnati, Ohio  
 The Visiting Nurse Association  
 Cincinnati, Ohio  
 The Children's Fresh Air Camp and  
 Hospital  
 Cleveland, Ohio  
 Cleveland Day Nursery and Free Kin-  
 dergarten Association  
 Cleveland, Ohio

- Dispensary of Babies' and Children's  
 Hospital of University Hospital of  
 Cleveland  
 Cleveland, Ohio  
 Merrick House Day Nursery Settle-  
 ment  
 Cleveland, Ohio  
 Red Cross Teaching Center  
 Cleveland, Ohio  
 University Public Health Nursing  
 District  
 Cleveland, Ohio  
 The Visiting Nurse Association  
 Cleveland, Ohio  
 Instructive District Nursing Associa-  
 tion  
 Columbus, Ohio  
 Community Nurse Association of Glen-  
 dale  
 Glendale, Ohio  
 Toledo District Nurse Association  
 Toledo, Ohio  
 Oklahoma Public Health Association  
 Oklahoma City, Oklahoma  
 Oklahoma City Public Health Nursing  
 Association  
 Oklahoma City, Oklahoma  
 Baby Health Station of Bethlehem  
 Bethlehem, Pennsylvania  
 Erie Anti-Tuberculosis Society  
 Erie, Pennsylvania  
 Freeland Coöperative Maternity and  
 Child Welfare Association  
 Freeland, Pennsylvania  
 Visiting Nurse Association of Eastern  
 Delaware County  
 Lansdowne, Pennsylvania  
 The Community Health Center  
 Philadelphia, Pennsylvania  
 Pennsylvania Tuberculosis Society  
 Philadelphia, Pennsylvania  
 Philadelphia Association of Day Nurs-  
 eries  
 Philadelphia, Pennsylvania  
 Philadelphia Child Health Society  
 Philadelphia, Pennsylvania  
 Philadelphia Health Council and Tu-  
 berculosis Committee  
 Philadelphia, Pennsylvania  
 Philadelphia Pediatric Society  
 Philadelphia, Pennsylvania  
 Pittsburgh Child Health Council  
 Pittsburgh, Pennsylvania  
 Public Health Nursing Association  
 Pittsburgh, Pennsylvania  
 Tuberculosis League of Pittsburgh  
 Pittsburgh, Pennsylvania  
 Visiting Nurse Association  
 York, Pennsylvania  
 State Board of Health, Division of  
 Child Hygiene  
 Waubay, South Dakota  
 Visiting Nurse Association  
 Milwaukee, Wisconsin  
 Alexander House Settlement  
 Wailuku, Maui, T. H., Hawaii  
 Philippines Chapter, American Red  
 Cross, Health and Nursing De-  
 partment  
 Manila, Philippine Islands  
 Provincial Board of Health, Public  
 Health Nursing Division  
 Victoria, Province of British Colum-  
 bia, Canada  
 Massachusetts Halifax Health Com-  
 mission  
 Halifax, Province of Nova Scotia,  
 Canada  
 The Babies' Dispensary Guild  
 Hamilton, Province of Ontario,  
 Canada  
 Royal Society for the Welfare of Moth-  
 ers and Babies  
 Sydney, Australia  
 Council on Health Education  
 Shanghai, China

The following agencies reported changes for the past year but had no report to make for the year preceding :

## COLORADO

### Colorado Springs

#### THE COLORADO SPRINGS DAY NURSERY

Our Nursery differs from the average Day Nursery as the problem in this city is not industrial. From 50 to 70 per cent of the children applying come from homes where tuberculosis is the problem. Patients come here from all over the United States and few have relatives or friends who can assist them. In order to remove young children from contact with the disease, residential care is given them. At least two-thirds of our work is of this character. Many of the children coming from these homes are physically under par. A thorough physical examination is given upon entrance. Necessary corrections are made by specialists so that the children are free to gain. They are weighed and measured once a month and those found underweight are given cod liver oil three times a day, extra feeding, special hours of rest and sun baths when indicated. The Nursery has a sixteen-bed Infirmary with small operating room in connection with it. Children requiring intensive care or those having even a slight temperature are removed to the Infirmary for observation and treatment. All the children are required to be vaccinated against smallpox before admission. While in the Nursery they are given toxin-antitoxin for diphtheria. In a recent Schick test made on those who had had toxin-antitoxin six months to three years 97.5 per cent gave a negative reaction.

Day children receive similar care to residents and are given treatment in the Infirmary if staying at home would necessitate their relatives giving up work. Temporary care is also given children whose parents wish to enter a hospital for an operation or to relieve an expectant mother of the burden of young children until after delivery and convalescence.

A medical record is kept of each child from time of entrance to discharge. We work in coöperation with the school nurse. The Nursery Physician is assisted by specialists all of whom give their services free. The Visiting Nurse Association has its offices in the Nursery building and the services of the nurses are at our disposal.

## INDIANA

### Evansville

#### EVANSVILLE PUBLIC HEALTH NURSING ASSOCIATION

During the year of 1926 the various individual local organizations interested in public health and public health nursing were finally fused into one organization, now known as the Evansville Public Health Nursing Association. Our organization is city-county wide, giving both private and public health nursing.

The city has been divided into twelve districts with one nurse in each, a thirteenth nurse serving as a floater who cares for all erysipelas and scarlet fever patients. The county proper is divided into two districts with a nurse in charge of each, one county nurse having the qualifications required of a supervisor.

We are rather proud of the fact that for the thirteen staff nurses employed in the city we have two trained field supervisors, making an average of six and a half nurses for each supervisor; however, in addition, the one supervisor is directly responsible for the administration of our three preschool Child Health Clinics where three trained pediatricians are in charge of the medical service. These three clinics are held weekly in three different sections of the city. The total clinical attendance for the fiscal year of 1926 was 4,498, and the total child hygiene visits made were 24,640. In our community only indigents are permitted to attend the Child Health Clinics, and inasmuch as our community has one of the lowest wage scales in the country, our financial rating of clinical patients must necessarily be on a low basis.

The second supervisor is in charge of the three weekly Tuberculosis Clinics, in which we are giving special attention to children. Our Tuberculosis Clinic is the Out-Patient Department of our county Tuberculosis Hospital, which is an institution of an unusually high standard. During the last year a pavilion was opened in the hospital for children. There is a long waiting list of children for care in this institution. The Superintendent and Assistant Superintendent of the hospital are the two examining physicians in the Clinics.

Our program of nursing includes general bedside, preschool, prenatal communicable disease, tuberculosis, and, in the county, the county school work. In the city of Evansville the Board of Education is in charge of the school nursing. Last September a highly trained school nursing executive was engaged and she was permitted to select an entirely new staff. The Medical Inspection Department of the public schools is making interesting and advanced plans for the further development of the School Health Service.

The latter part of 1926 our Association was given permission by its Medical Advisory Committee to organize a prenatal clinic, which we hope soon to organize.

Our Public Health Nursing Service, which has completed its reorganization, has a budget this year of \$55,000. Evansville, including the county, has a population of 100,000, according to the last official census. The Public Health Nursing work of Evansville has been in a process of organization and reorganization for the past two years. We have now achieved the desired result and the work is conducted on a county unit basis and completely fused, and under the administration of one director and one Board of Directors.

### South Bend

#### CHILDREN'S DISPENSARY AND HOSPITAL ASSOCIATION

In the past year we have added to our work another Ophthalmopathy Clinic,

which gives us two clinics a week; also an Endocrine Clinic, held one day each week; otherwise our work remains the same as last year.

We are doing very extensive work along the lines of corrective gymnastics, and special corrective exercises with orthopedic patients, and the number has greatly increased.

## MICHIGAN

### Detroit

#### CHILDREN'S HOSPITAL OF MICHIGAN

In the year 1926 the Children's Hospital of Michigan opened two new wings which added 110 beds to our capacity. The education of men having had general internships and desiring to specialize in Pediatrics was also undertaken July 1, 1926. A habit clinic which was established in 1925 was further developed during this year.

The work accomplished by the hospital has practically doubled since 1921.

The planning of a new unit for the convalescent home which is located at Farmington, Michigan, was also undertaken and the money for its establishment was given by the President of the Board, Honorable James Couzens, United States Senator.

### Lansing

#### DEPARTMENT OF HEALTH

Our Bureau of Laboratories has been doing intensive work in scarlet fever, resulting in our adding scarlet fever streptococcus toxin to our list of biologicals for distribution.

## NEW JERSEY

### East Orange

#### HEALTH DEPARTMENT

At the beginning of the year we took on another physician, which made it possible to divide the four clinics equally between the two physicians and the two nurses, each having two stations. This we are sure increased the efficiency of these clinics and it is our hope for 1927 to put on still another physician and two more stations. We added another nurse in September, 1926.

We considered your appeal for some special May Day activity, and decided upon a whole week's practical effort. In each of our four clinics we arranged for our first pre-school effort, supplemented by immunization against diphtheria and vaccination against smallpox. The adjustment mentioned above made it possible to add to our clinics and pre-school activities, and we took advantage of the May Day effort to initiate it. During that week 79 complete physical examinations were made; 39 defects were discovered as shown in the following tabulation:



Defects	No. found	No. corrected
Tonsils. . . . .	20	10*
Rickets. . . . .	6	5†
Mental. . . . .	2	2‡
Cervical Adenitis . . . . .	2	2
Phimosis. . . . .	5	4
Hernia. . . . .	3	1
Convergent Strabismus . . . . .	1	1†
	<hr/> 39	<hr/> 25

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\* Three moved away.

† Under treatment.

‡ Referred to private physician.

A careful record was made of the condition of each child, and where defects were found the parents were urged to take the child to the family physician. Twenty-five of these thirty-nine defects were corrected and in view of the fact that three moved away, shows 70 per cent remedied.

In addition to this, sixty-five pre-school children were immunized against diphtheria, while seven others had one or two inoculations. Thirty-eight children were vaccinated. Since then, this pre-school work has become a regular part of the Department's routine effort.

### Jersey City

#### HUDSON COUNTY TUBERCULOSIS LEAGUE

The County Department carries on the tuberculosis clinics and sanatoria so that the Tuberculosis League has its program centered upon education.

The one thing that seems to be unusual in our program is the way which we keep families together while the wage earner is away taking the cure for tuberculosis. It has been possible through the coöperation of the State Board of Children's Guardians to maintain intact nearly every family where the wage earner is away, providing it with proper budget; the children with clothes and medical attention so that the family is ready to receive the man when he returns from the tuberculosis sanatorium. The Tuberculosis League makes the investigation; recommends to the State Board what should be done and provides the money until the State Board can act. We have under such care about 300 families, some for a period ranging from six months to four or five years. Of this number about fifty have become self-supporting, the man has returned able to work and is now supporting his family.

One thing which we anticipate doing for the present year is to place in every school in the county where it will be used either a copy of "Health Education Procedure" by Miss Wootten, as one means of helping the teacher in her problems. We are also compiling quite a complete scrap book of material

which is available for the teachers. By doing this we anticipate that the teachers will be better able and qualified to carry on quite an intensive health education in the schools. This is being done by the parochial schools as well as the public schools.

Of course we carry on a health education program through posters, educational material, movies, and so forth, amongst various groups. We also use motion pictures in the playgrounds during the summer months.

### Salem

#### THE SALEM CHILD WELFARE ASSOCIATION

The scope of work of the Salem Child Welfare Association has been changed and broadened considerably during the year 1926. Regular home visiting to all infants and preschool children was started in March of that year. Since April 15, 1926, a physician has been in attendance at the health centers for babies and preschool children one hour of each clinic day. The physician does not prescribe treatment, but gives complete physical examinations to all infants and preschool children at regular intervals. The physicians in the community are alternating so that each physician has about one day a month. A small fee is paid to each in appreciation of the services rendered. On June 30, 1926, a health center was opened for the negro infants and preschool children with a negro physician in attendance every week. The attendance is increasing gradually.

In October, 1926, the name of the organization was changed to "Child Welfare and Visiting Nurse Association of Salem." The work was entirely reorganized and a constitution and by-laws were adopted in December, 1926. Under this new management, a medical advisory committee was appointed by the local medical society to be responsible for the medical policies of the organization, and a men's advisory committee was appointed to be consulted concerning the business policies.

On December 1, 1926, general visiting nursing (not including hourly nursing, delivery service or communicable disease nursing) including nursing service to the policy holders of the Metropolitan Life Insurance Company was started. At this same time a publicity campaign was started to cover a period of three months. This campaign included articles in the local newspapers every week and a series of eight letters to be sent to all mothers of infants and preschool children in Salem.

This statement includes the significant changes in the work of our organization as carried on by one nurse.

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## NEW YORK

## New York

## THE NEW YORK DIET KITCHEN ASSOCIATION

The Children's Health Service maintained by the New York Diet Kitchen Association calls special attention to the work among the group of children between the ages of two and six years which has been materially enlarged during the past year. With practically the same districts 463 more children were reached, making a total of 2,124 against 1,661 in the preceding year. This would seem to indicate that the mothers registered are being gradually educated to the importance of this period in their children's lives, and that therefore they are willing to coöperate more heartily with doctors, nurses and other staff members at the centers.

It is also now more possible to secure physicians for this branch of the Association's health service, who have had training and experience with the normal child between two and six years and who are specially interested in this age group.

## SOME FIGURES FROM YEAR'S REPORT

Babies under 2 years of age.....	5,713
Attendance at Conferences.....	33,634
Deaths. ....	32
Children 2-6 under care.....	2,124
Attendance at Conferences, 2-6.....	4,347
Deaths. ....	None
Mothers instructed .....	5,604
Home visits by staff .....	14,711

During the past twelve months a good deal of time has been given to unifying the standards and methods of work in the Association's six centers, and also steps have been taken to secure a more complete physical examination for the children. Posture work and nutrition activities have also been strengthened.

In connection with the posture work the Association has improved and modified its posture record card after many consultations with recognized authorities in this field and with others in this city now conducting posture classes in health centers, and the card represents the best ideas of those interested in this feature of health service for the little child.

As posture work with the preschool child was first introduced in a health center of the New York Diet Kitchen Association it has been gratifying to those responsible for this fact to see its gradual addition to the service of other health organizations with apparently satisfactory results.

All children registered at the Association's centers are examined by the physicians in charge of the preschool conferences and only such as in their opinion require this attention are referred to the posture teacher.

**Syracuse****CITY OF SYRACUSE HEALTH DEPARTMENT COÖPERATING WITH THE SYRACUSE  
HEALTH DEMONSTRATION**

The account of this Demonstration includes the following statistical data: Estimated population on July 1, 1926, 188,845; birth rate 21.2 per 1,000; infant death rate, 69.2 per 1,000; infant death rate from diarrheal diseases, reduced from 10.7 in 1925 to 5.7 in 1926.

Some of the more important points in the development of the child welfare work include 10 clinic stations with 10 clinic sessions per week were operated through the year with a total of 1,213 new cases and 9,521 clinic visits.

Prenatal service was enlarged by the addition of two clinic stations, making a total of 6. This service is conducted through cooperation with the Child Health Committee. A total of 379 new cases were enrolled at these clinics in 1926, making approximately 1 in 11 of the total number of confinement cases during the year 1926.

Psychiatric social work was inaugurated in the public schools.

An intensive diphtheria immunization campaign was carried on among preschool and school children in selected districts early in the year and later in the year in the parochial schools.

Health work was extended to the continuation schools.

Undernourished and underweight children and those exposed to tuberculosis were given a special examination in school. This service is exclusive of the children's tuberculosis clinic held once a week at the Free Medical Dispensary.

Vision and hearing service were undertaken in the public schools.

A ventilation survey was made in selected schools.

A special program for the protection of infants against measles was carried out during the measles epidemic during the early part of 1926. This campaign sought protection especially for the children under two years of age and utilized human immune serum for the protection of children exposed. The fact that only 4 deaths occurred during the epidemic which brought 2,428 cases seems to indicate that the methods used were effective in protecting children in the early age group.

Whooping cough clinics were held utilizing vaccine, x-ray, or a combination of both in the treatment of cases.

A preschool age clinic was established in the fall of the year which operates with three clinic sessions a week, one a general clinic where children are examined jointly by the medical specialists attached to the service, and two special clinic sessions, one of which is devoted to mental and behavior problems and the other to orthopedic and posture work.

**Troy****THE DAY HOME CHILD WELFARE CLINIC**

We have had two changes in our work during the past year. We are having weekly dental clinics in the dentist's office. We are having monthly orthopedic clinics instead of periodical ones.

**Utica****UTICA VISITING NURSE ASSOCIATION**

Two changes have taken place in our Baby Welfare work in Utica during the past 15 months.

The first was the changing from our specialized program to a more generalized program by combining the nursing service of the Baby Welfare Committee with three other organizations in the city, to be known as the Utica Visiting Nurse Association. The city was divided into districts and a nurse assigned to each district to be responsible for the prenatal, maternity, infant, preschool, and bedside nursing, and the nursing service for the Metropolitan and John Hancock Insurance Companies. A director and assistant director were engaged to take charge of the work. This Visiting Nurse Association is managed by a Board composed of representatives from each of the organizations uniting, so our Baby Welfare Committee has direct representation. It was considered advisable for the Baby Welfare Committee to continue in charge of the four Child Welfare Stations in the city. At each of these stations prophylactic clinics are held twice a week for infants and preschool children, and prenatal clinics twice a month. The Visiting Nurse in whose district each station is located is in charge of the clinic and the nurses of the adjoining districts alternate in assisting her during clinical hours. Our Baby Welfare work seems to have gotten along very well during the past year under the new arrangement.

Our second change was the plan for receiving the list of newborn babies from the City Board of Health and for calling in the home to acquaint the parents with the health facilities in the city, and to give any advice concerning the care of the baby. This has brought the nurses in contact with 100 to 200 new infants each month and should prove to be of great benefit.

**OHIO****Columbus****THE OHIO STATE ASSOCIATION OF GRADUATE NURSES**

A new phase of our work is the Service Bureau, which the Board of Trustees voted to set up in the State Headquarters office.

**Eaton****PREBLE COUNTY BOARD OF HEALTH**

Our only significant change is that we now have a full time health commissioner in Preble County instead of a part time commissioner as before.

**PENNSYLVANIA****Scranton****DISTRICT NURSE ASSOCIATION**

The District Nurse Association of Scranton maintain five Child Health Stations, where seven conferences are held weekly.

The present and past policy of this organization is to extend this service to those people who cannot afford the supervision of a private physician.

The registration of new babies in 1926 totalled 1,189 and there was an average attendance of 18 plus at the Stations throughout the year.

The colored population of Scranton is 1,000. During the past year a special effort had been made to get the colored babies into the Stations for examination and supervision. The results have been gratifying, 15 are registered and the feeling that the Stations were not for them is being broken down.

The year 1927 promises to be a fruitful one,—two new Child Health Stations will be opened in parts of the city which are not being reached at the present time.

**WISCONSIN****Racine****BOARD OF HEALTH**

Most important from a child health viewpoint was the progress made toward securing school medical examination. Beginning with a publicity campaign linked with the sale of Christmas Seals in December, 1925, we based our sale on the expressed intention to demonstrate school medical examination. A successful sale provided the money for a physician's services.

The May Day Demonstration stressed school medical examinations. Before this, the Racine Tuberculosis Society had offered the Health Department the services of a physician for twelve weeks. This doctor was added to the team made up of a dentist and nurses, which was already working in the schools. Almost 1,200 children were examined, and the results of these examinations made into graphic charts for presentation to the Budget Committee of the Common Council.

Early in December, 1926, the Common Council appropriated money for the employment of a school examining physician for seven hours a week during the school year.

In line with the national campaign to eradicate diphtheria, we started a drive in October, 1926, and by the end of December had immunized 3,500

children, of which 20 per cent were in the one to five age group, 33 per cent in the five to seven age group, and 47 per cent in the eight to sixteen age group. Seven more schools accounted for about 1,500 more immunizations, which remained to be done in 1927.

In the effort to bring child health facts into the homes, we published a twelve-page booklet entitled "Pictures of Health with Birth Registration Certificate." It combines the birth certificate with a baby book containing health information, spaces for snapshots, a list of authentic books and certificates of smallpox vaccination and diphtheria prevention.

Appraisal of our child health work, according to the American Public Health Association rating schedule, shows a slight improvement in our pre-natal work from 20 to 23 points out of 75, a considerable improvement in our infant work from 33 to 55 points out of 75, improvement in our pre-school work from 36 to 46 points out of 50, and progress in our health work for school children from 92 points to 112 points out of 150.

## BRAZIL

### Sao Paulo

#### INSTITUTO DE HIGIENE

The only noteworthy fact we have to report is the increased development of the Model Health Center located at this Institute, and the organization of two more "Centers" in this city. Formerly the State Child Health Organization of this city consisted in a single dispensary, which did chiefly clinical work. We have now the departments of pre-natal hygiene, infant, child, and pre-school hygiene as parts of the Health Center Organization. About 47,396 children have been treated and instructed in the three centers. The department of pre-natal hygiene has been greatly developed.

The Sanitary Service of the State, in connection with the department of pathology of the Medical School, has also organized a new department for the verification of the cause of death. The Health Department pays the salaries of two full-time pathologists to assist in making the autopsies on from 8 to 12 bodies a day. Many interesting facts were revealed especially in the case of newborn and stillborn babies. Syphilis has proven to be a much more important cause of death than was previously thought.

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The following agencies are members of the Association but did not send in a report either last year or this:

Hartford Tuberculosis and Public Health Society	Visiting Nurse Association of Eastern Delaware County
Hartford, Connecticut	Lansdowne, Pennsylvania
Brown Company — District Nursing Department	Visiting Nurse Association Bethlehem, Pennsylvania
Berlin, New Hampshire	Irene Kaufman Settlement Pittsburgh, Pennsylvania
The Charity Organization Society of Buffalo	The Providence Tuberculosis League Providence, Rhode Island
Buffalo, New York	Civic Federation of Dallas Dallas, Texas
National League of Nursing Education New York, New York	The General Board of Primary Associations of the Church of Jesus Christ of the Latter-Day Saints
Riverdale Neighborhood Association Riverdale-on-Hudson, New York	Salt Lake City, Utah





## EXHIBITS

### EXHIBITS BY THE FEDERAL GOVERNMENT

*The United States Chamber of Commerce provided every facility for displaying the government exhibits.*

Department of Agriculture

Bureau of Exhibits and Home Economics Bureau

Department of Commerce

Census Bureau

Department of Labor

Children's Bureau

Department of the Interior

Bureau of Education

Division of Physical Education and School Hygiene and  
the Nursery, Kindergarten and Primary Education  
Division

Treasury Department

Public Health Service

Division of Scientific Research

### OTHER EXHIBITS IN THE HALL WHERE THE MEETINGS WERE HELD

The American Child Health Association

Division of Research

Division of Health Education

The American Red Cross: The Association was invited to see the exhibits in the Museum of the Red Cross Headquarters

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**EXHIBITS PREPARED BY THE  
FEDERAL GOVERNMENT**

# THE UNITED STATES DEPARTMENT OF AGRICULTURE

Bureau of Home Economics and Division of Exhibits

## WATCH FOR THE SIGNS OF GOOD AND POOR NUTRITION ON THE ROAD TO HEALTH

### Signs of Good Nutrition

Straight, sturdy legs  
Straight back, flat shoulder blades  
Full, rounded chest  
Strong, white teeth  
Firm, rosy flesh  
Bright, sparkling eyes  
Body erect, strong and well developed  
Happy, keen, energetic  
Healthy appetite

### Signs of Poor Nutrition

Bow legs, knock knees  
Stooped back, winged shoulder blades  
Flat, narrow chest  
Decayed, uneven teeth  
Pale, flabby flesh  
Dull, dark-circled eyes  
Body stooped, skinny, under-developed  
Nervous, irritable, listless, easily tired  
Finicky about food  
Backward in school

In front of the panel giving these signs of good and poor nutrition was a traffic tower with illuminated "stop-go" signs. As the green "go" sign flashed on, an illuminated green arrow pointed to the signs of good nutrition. The signs of poor nutrition were similarly pointed out by the red "stop" sign and arrow. To make the story even more graphic, life-size cutouts of two children of the same age, one well nourished and the other undernourished stood beneath the traffic sign watching for their signals. These photographs were tinted from life and showed the typical coloring of children of these two types. Also by their posture they indicated the part nutrition plays in the progress on the road to health. The undernourished boy stood with hands behind him arrested by the red light. The well-nourished girl, however, was up on her toes ready to take the "go" signal.

The amounts of food needed by persons of different age and activity in terms of energy and building material were shown in chart form.

The kinds of foods needed for good nutrition were stated in the following way:

#### Fruits and Vegetables

These supply minerals, vitamins, and "roughage" necessary for normal growth and health

#### Meat, Poultry, Eggs and Fish

These supply efficient protein for building body tissues and to some extent minerals and vitamins

#### Milk and Dairy Products

These supply minerals and vitamins as well as efficient protein

#### Bread, Breakfast Foods, and Other Cereals

These supply energy and some protein in an economical form

#### Fats and Sweets

These supply energy

The next booth translated these food facts into terms of balanced diets for a family of five. In a case resembling a cupboard and refrigerator with glass doors, were displayed the food supplies for such a family for a day in summer and a day in winter. Actual foods were used where possible and wax models were made of the more perishable kinds. On adjoining panels enlarged pictures showed the various members of the family eating breakfast, lunch, and dinner, made up from these food supplies. Thus food selection and preparation are shown from the standpoint of economy, attractive appetizing meals, and good nutrition for every member of the family.

A striking demonstration of the effect of food on growth and development, particularly of bones, was shown by means of a series of mounted white rats and rat skeletons. Five male rats from the same litter were used for this demonstration, and save for diet all lived under exactly the same conditions. Each rat had all he wanted of a basal diet of meat, cereal, potato, butter, sugar, and salt. One had this diet only. For the others were added varying quantities of green vegetables or milk or both. These added foods had a striking effect on growth and bone development. The animal that had a generous quantity of vegetables and the one that had all the milk he wanted were normal and nearly twice the size of the animal kept on the basal diet.

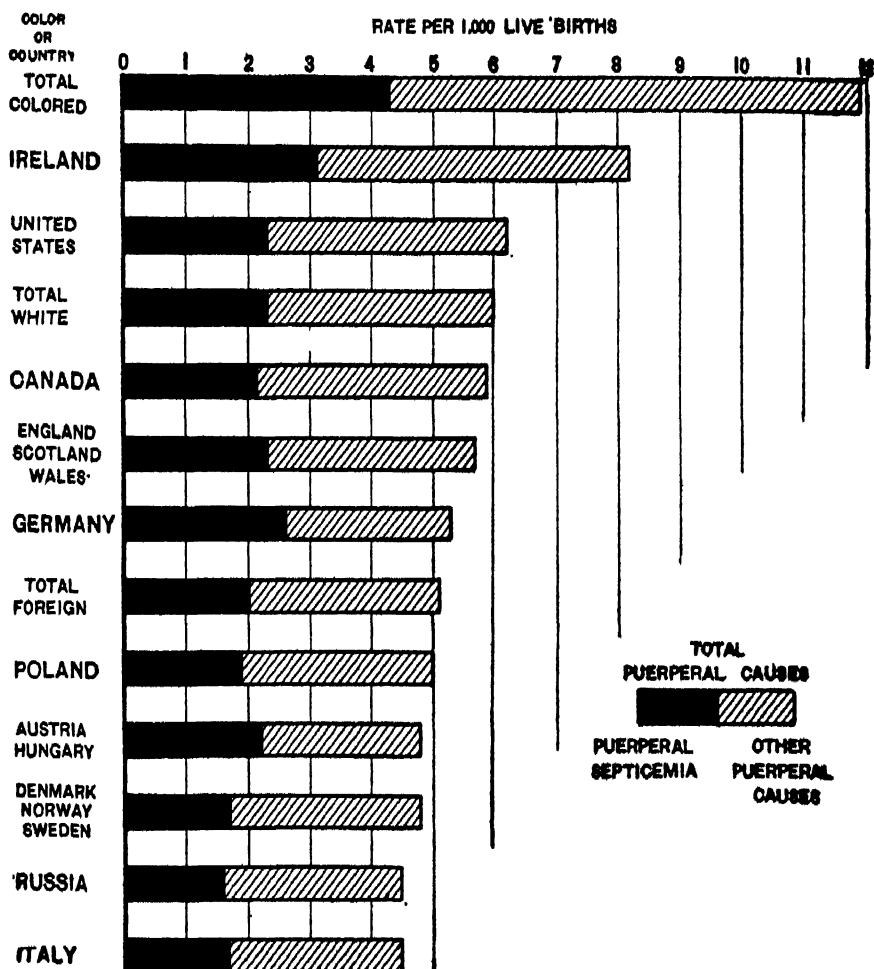
# UNITED STATES DEPARTMENT OF COMMERCE

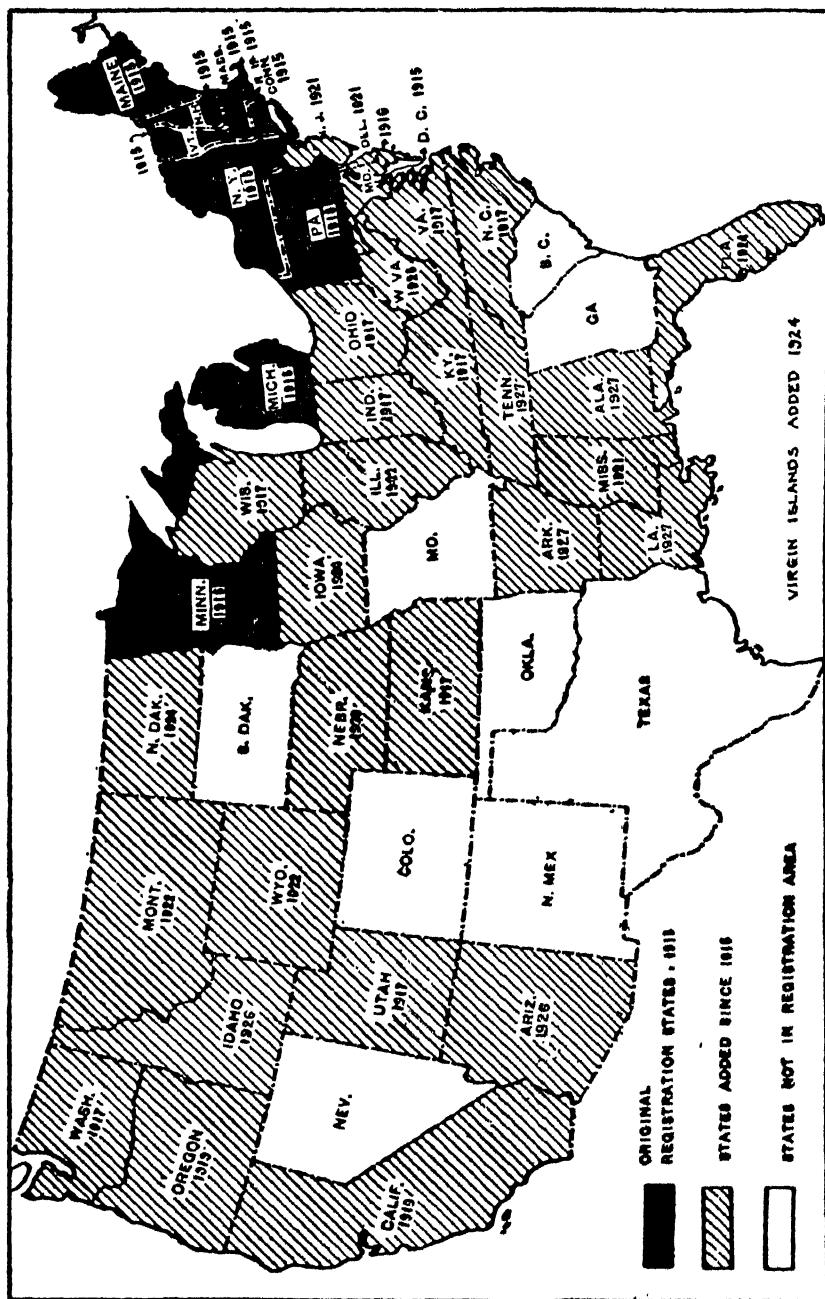
## Bureau of the Census

### INFANT MORTALITY RATES, BY AGE, IN THE ORIGINAL BIRTH REGISTRATION AREA (EXCLUSIVE OF RHODE ISLAND): 1915-1925

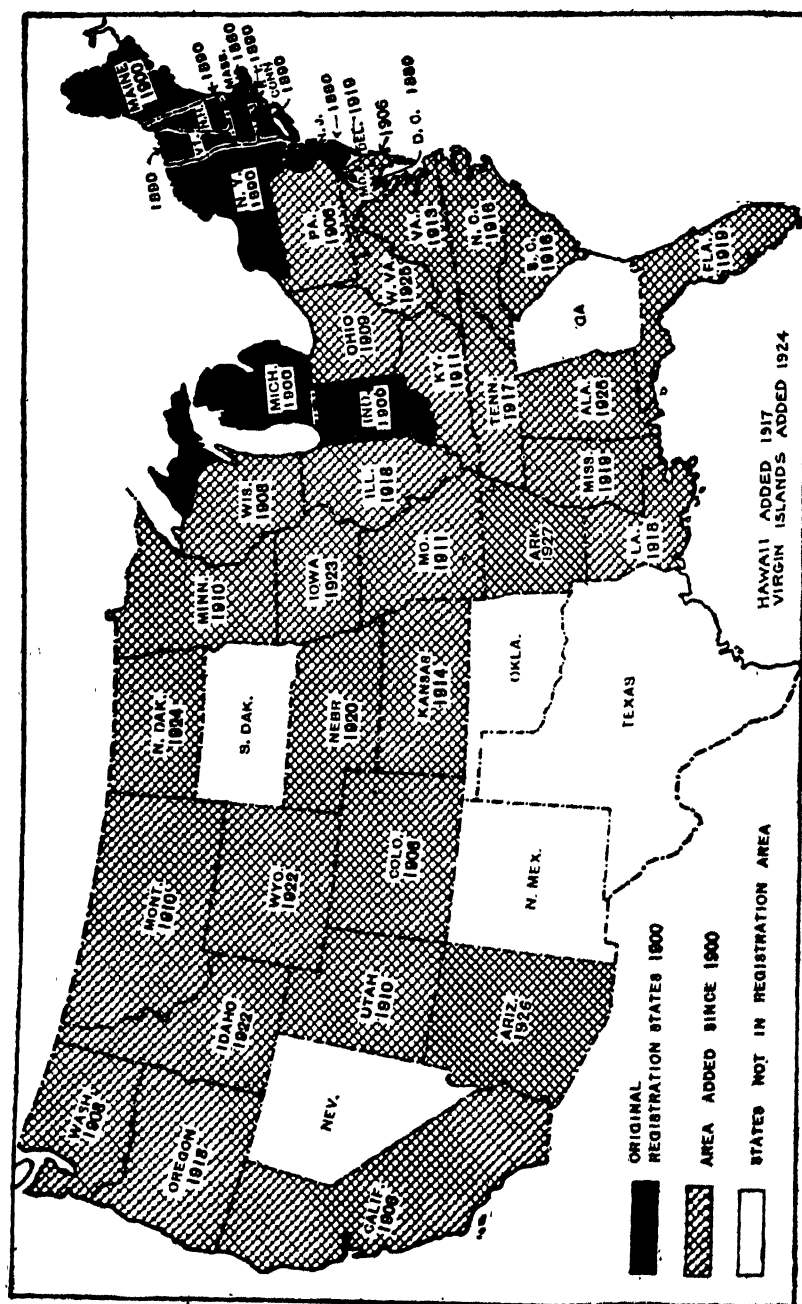
Age	Infant mortality rates (deaths under 1 year of age per 1,000 births)										
	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915
Under 1 year	73.6	71.6	79.3	79.2	78.7	89.9	88.7	105.8	96.1	100.0	99.6
Under 1 day	14.7	14.6	14.5	14.6	14.6	14.4	14.1	15.1	14.6	14.6	15.0
1 day	4.4	4.3	4.5	4.5	4.6	4.7	4.6	5.1	4.7	4.8	4.8
2 days	3.3	3.5	3.4	3.4	3.6	3.4	3.4	3.7	3.5	3.7	3.5
3 to 6 days	6.1	6.4	6.3	6.5	6.5	6.5	6.2	6.6	6.7	6.9	6.7
1 week	4.5	4.5	5.0	5.0	5.0	5.3	5.8	6.0	5.8	5.8	6.0
2 weeks	3.0	3.0	3.6	3.4	3.6	4.0	4.1	4.6	4.4	4.5	4.6
3 weeks	2.5	2.6	2.8	2.7	2.8	3.4	3.2	3.6	3.6	3.5	3.7
Under 1 month	38.5	38.9	40.2	40.1	40.8	41.8	41.4	44.6	43.3	43.8	44.3
1 month	5.9	5.9	6.7	6.5	6.5	7.6	7.6	9.1	8.7	9.0	9.0
2 months	4.8	4.4	5.1	5.2	5.2	6.1	6.3	7.5	6.9	7.2	7.5
3 to 5 months	10.7	9.6	11.5	11.4	11.6	14.2	14.4	17.5	15.9	16.6	16.8
6 to 8 months	7.7	7.1	8.8	8.8	8.3	11.0	10.8	14.7	11.8	12.9	12.5
9 to 11 months	6.0	5.7	7.1	7.2	6.3	9.1	8.3	12.4	9.5	10.6	9.4

DEATH RATES FROM PUERPERAL CAUSES  
PER 1,000 LIVE BIRTHS, BY COUNTRY OF MOTHER,  
IN THE BIRTH REGISTRATION AREA OF 1925









GROWTH OF THE REGISTRATION AREA FOR DEATHS: 1880-1927

In addition to the registration states, the registration area in each year included certain cities in non-registration states.

# THE CHILDREN'S BUREAU

## POSTURE PANELS

The posture exhibit prepared by the Children's Bureau included a set of posture panels showing the relation between posture and sex, posture and age, posture and nutrition and the effects of posture training on a group of school children during one school year. The panels were prepared in colors, and the figures for the classes receiving posture training were compared with the figures for the control classes, so that the improvement resulting from posture training was shown.

This material was based on a study made for the Children's Bureau by Dr. Armin Klein, director of the posture clinic of the Massachusetts General Hospital and author of the bulletins "Posture Exercises" and "Posture Clinics" published by the Children's Bureau. A report of this study is now in preparation and will include these posture panels.

## RICKETS MODEL

Babies sunning themselves on velvety green lawns, in their own pleasant back yards, bare pink bodies exposed to the health-giving rays of the sun—this is the new rickets model that has been prepared for use throughout the country by the Children's Bureau.

As a result of the rickets study made by the bureau in the New Haven Clinic in connection with the Department of Pediatrics of the Yale School of Medicine the value of sunlight in the prevention and cure of this common disease of early childhood is being emphasized in every possible way. Normal growth of bone is dependent not only on the food that the child eats, the bureau says, but also on the direct sunlight that he receives, for the sunlight provides the body with the power to utilize the food. If a baby is constantly deprived of direct sunlight, his bones will not develop normally, his muscles will be flabby, and his skin will be pale. He will probably have rickets.

To ward off rickets, preventive measures must be begun very early in the infant's life, for rickets makes its appearance in very young babies. These measures are the giving of sunbaths and of cod-liver oil, the so-called "bottled sunshine." (This model may be borrowed, without cost, from the Children's Bureau.)

# INFANT MORTALITY BY CAUSE OF DEATH, 1924

## United States Death Registration Area

Prenatal and natal causes.....	78,306
Respiratory diseases .....	23,837
Gastric and intestinal diseases.....	22,966
Epidemic and infectious diseases.....	14,219
Other unknown causes.....	22,076

# INFANT MORTALITY BY PRENATAL AND NATAL CAUSES, 1924

## United States Death Registration Area

Premature birth .....	39,764
Congenital malformations .....	13,023
Injuries at birth .....	10,297
Congenital debility .....	8,069
Other diseases of early infancy.....	5,396
Syphilis .....	1,757

# INFANT MORTALITY BY MONTH OF LIFE, 1924

Deaths under 1 year of age (exclusive of stillbirths) in the United States  
Death Registration Area (exclusive of Hawaii)

1 month . . . . .	86,967	7 months.....	5,847
2 months . . . . .	13,381	8 months.....	5,056
3 months . . . . .	10,251	9 months.....	5,054
4 months . . . . .	8,488	10 months.....	4,586
5 months . . . . .	7,327	11 months.....	4,118
6 months . . . . .	6,226	12 months.....	4,103

# MATERNAL MORTALITY BY CAUSE OF DEATH, 1924

Deaths of mothers from certain causes connected with childbirth.  
United States Death Registration Area

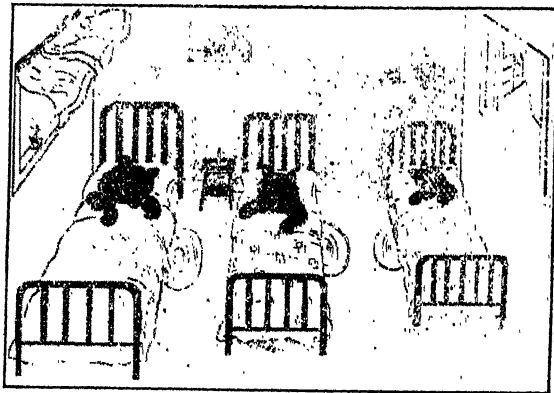
Puerperal septicemia . . . . .	5,745
Puerperal albuminuria and convulsions.....	4,287
Puerperal hemorrhage . . . . .	1,517
Accidents of pregnancy . . . . .	1,393
Other accidents of labor . . . . .	1,646

The figures quoted are from Reports of the United States Bureau of the  
Census, Mortality Statistics.

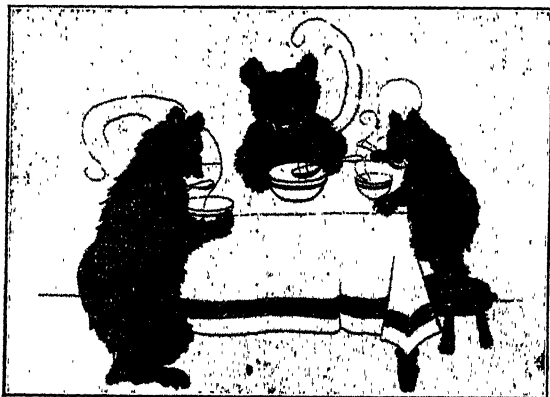
The charts were prepared by the Children's Bureau.

*The  
Three Bears  
and the  
Good Health  
Rules*

*Prepared by the  
Federal Children's Bureau*



*A Bed for Each and Open Windows*

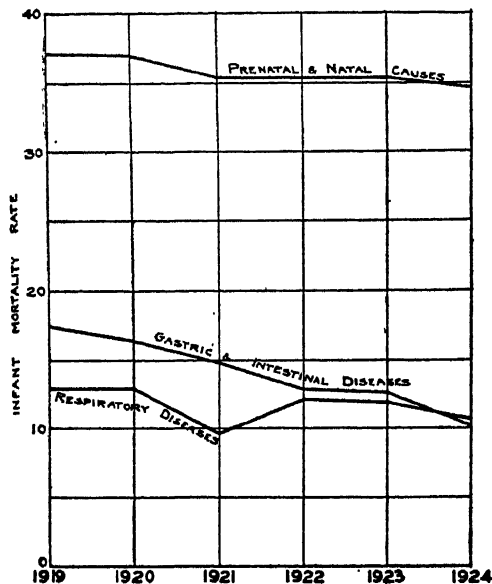


*They Eat  
Hot Cereal  
For Breakfast*

*They Take  
a Walk  
In the  
Open Air  
Every Day*

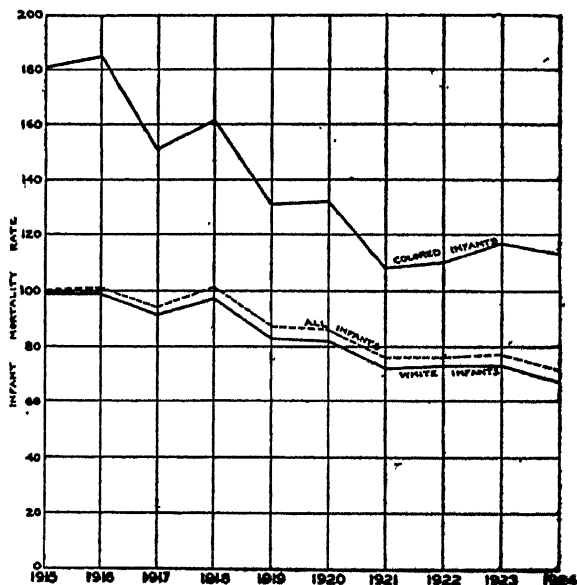


# INFANT MORTALITY RATES IN EXPANDING BIRTH REGISTRATION AREA



By Cause of Death,  
1919-1924

By Color,  
1915-1924



*From Birth Statistics,  
United States Bureau  
of the Census*

# THE BUREAU OF EDUCATION

## The Division of Physical Education and School Hygiene

The Division of Physical Education and School Hygiene of this Bureau exhibited charts and posters as follows:

**The Highway of Health.** This pictures a broad roadway paved with paving blocks representing good health-habits "right diet," "pure air, sunlight," etc., with winding paths running off to the sides representing bad habits and leading to various forms of resulting ill health.

Map showing States having laws requiring physical education in public schools. These States now number 34 as follows: Alabama, California, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nevada, New Jersey, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, Virginia, Washington, West Virginia, Wisconsin.

Map showing States having State directors of physical education. These number 15: Alabama, California, Connecticut, Florida, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, Pennsylvania, Virginia, West Virginia.

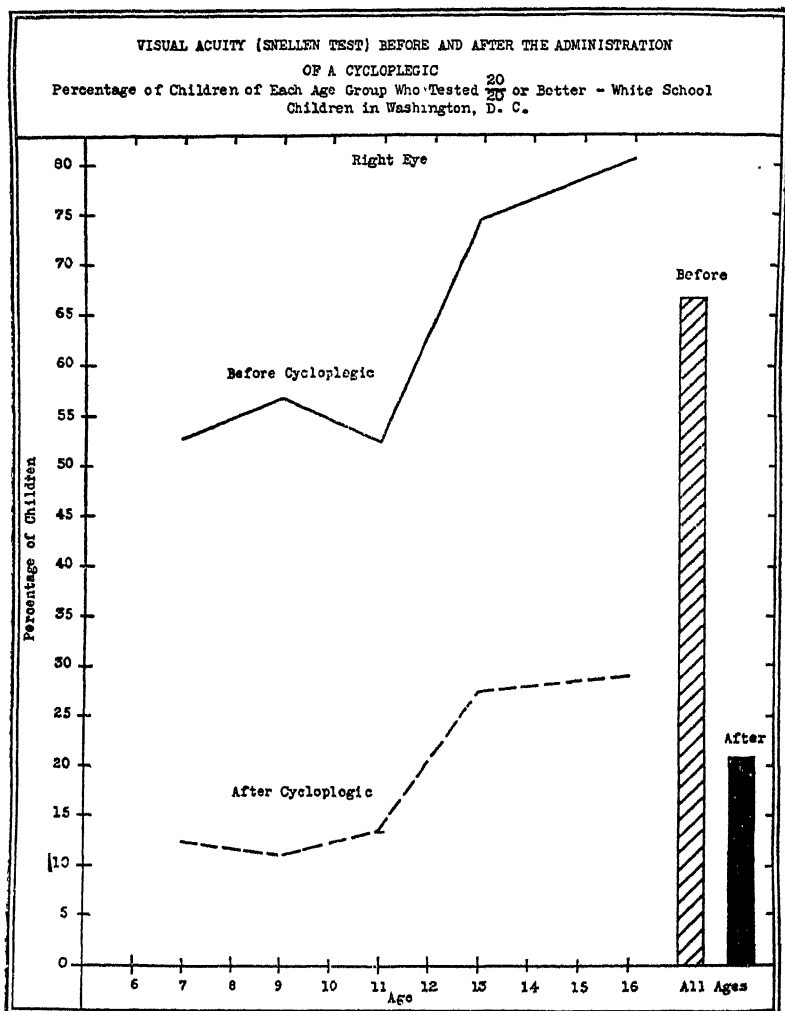
Map showing States having mandatory laws for medical inspection of school children: Arizona, Arkansas, Colorado, Florida, Idaho, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Utah, Vermont, Virginia, Wyoming.

## The Nursery, Kindergarten, Primary Education Division

Stereopticon pictures showing activities in nursery schools, kindergarten and primary grades which were in keeping with the best ideas of healthful living for young children and which demonstrated modern school ideals of developing the child's body and his mind through the same activities were shown in an automatic reflectoscope. Publications of the Bureau of Education dealing with the educational work with young children were displayed. Lists of these publications may be obtained upon application to the Bureau of Education.

# UNITED STATES PUBLIC HEALTH SERVICE

## Division of Scientific Research



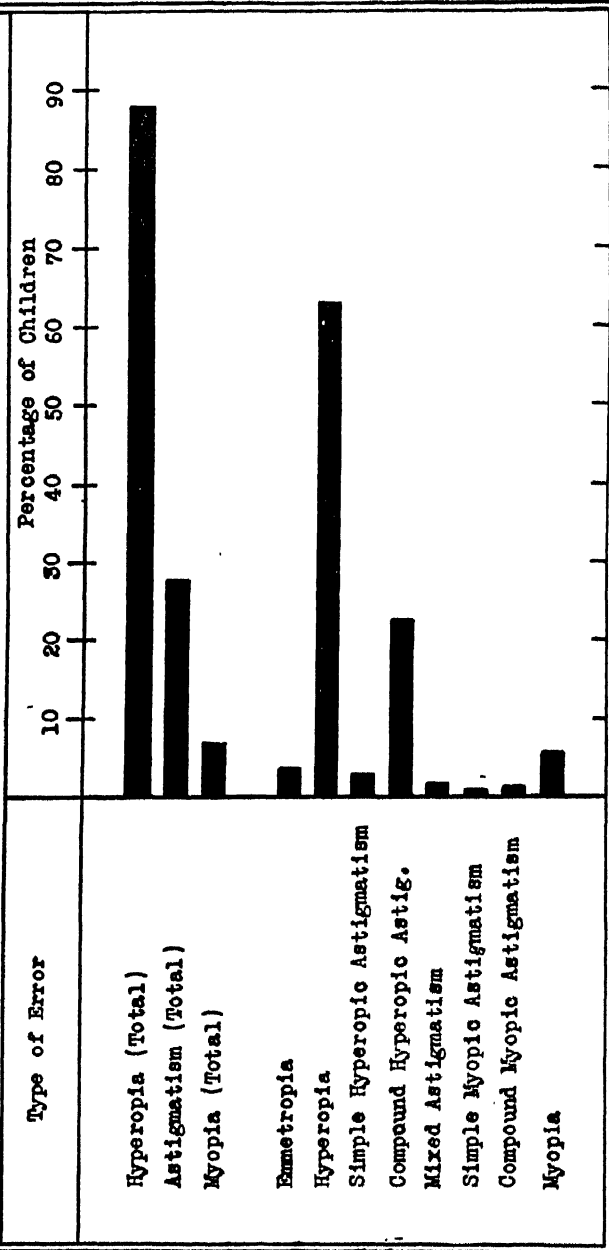
VISUAL ACUITY (SNELLEN TEST) BEFORE AND AFTER THE ADMINISTRATION  
OF A CYCLOPLEGIC

Percentage of Children of Each Age Group Who Tested  $\frac{20}{20}$  or Better—  
White School Children in Washington, D. C.

PREVALENCE OF VARIOUS TYPES OF REFRACTIVE ERRORS AS DETERMINED BY RETINOSCOPIC  
EXAMINATION AFTER THE ADMINISTRATION OF A CYCLOPLEGIC

White School Children in Washington, D. C.

RIGHT EYE

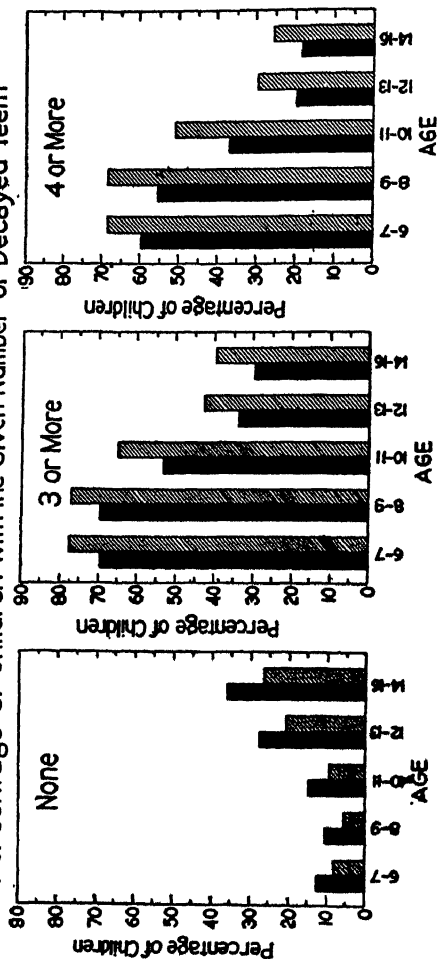




CONDITION OF THE TEETH OF CHILDREN OF GOOD OR EXCELLENT NUTRITION COMPARED WITH CHILDREN OF FAIR OR POOR NUTRITION AS JUDGED FROM CLINICAL EVIDENCE . . . BASED ON ABOUT 10,000 CHILDREN IN S.CAR., VA., MD., DEL., AND NEW YORK STATE.

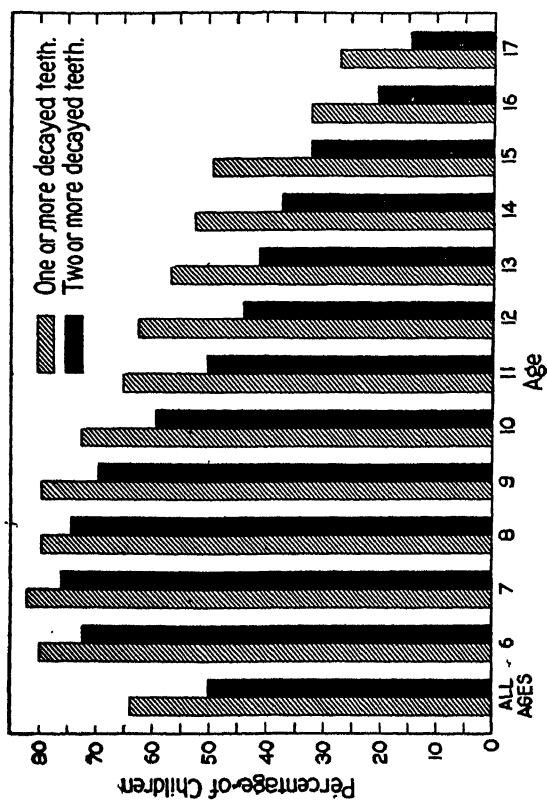
■ Nutrition Good or Excellent  
 ▨ Nutrition Fair or Poor

Percentage of Children with the Given Number of Decayed Teeth



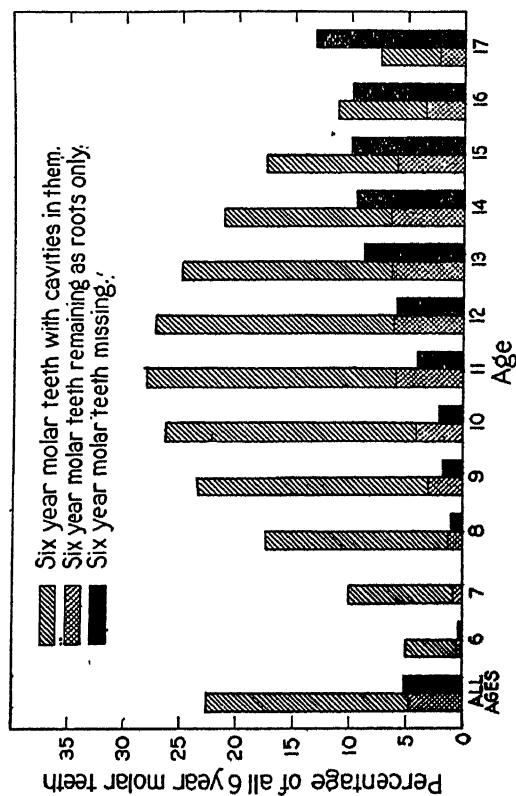
U.S. PUBLIC HEALTH SERVICE

PERCENTAGE OF CHILDREN 6 TO 17 YEARS OF AGE INCLUSIVE  
WHO HAVE DECAYED TEETH  
(Based on 6305 School Children of W.Va.)



U.S. PUBLIC HEALTH SERVICE

PERCENTAGE OF 6 YEAR MOLAR TEETH DECAYED AND PERCENTAGE MISSING FOR CHILDREN 6 TO 17 YEARS OF AGE INCLUSIVE  
(Based on 6305 School Children of W.Va.)  
(100% = 4 times the number of Children or the total number of 6 yr. molar teeth.)



U S PUBLIC HEALTH SERVICE

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# CHILD HEALTH PROGRESS IN TWO DECADES

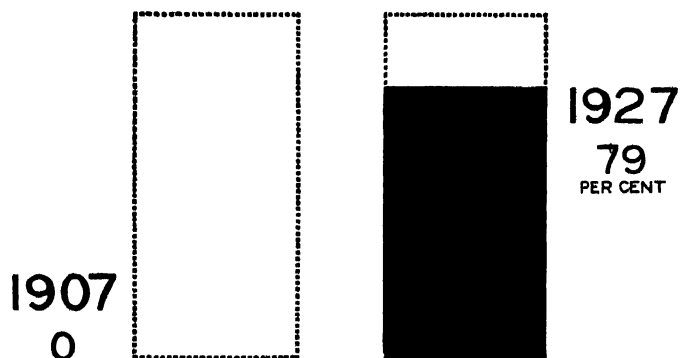
Charts Prepared by the  
AMERICAN CHILD HEALTH ASSOCIATION  
DIVISION OF RESEARCH AND HEALTH EDUCATION DIVISION  
FOR THE 1927 ANNUAL MEETING

NOTE: If you wish to order reproductions of these in chart or in slide form please write to the American Child Health Association, 370 Seventh Avenue, New York City.

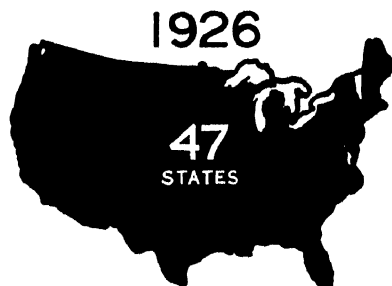
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**CHARTS PREPARED BY THE RESEARCH DIVISION  
OF THE  
AMERICAN CHILD HEALTH ASSOCIATION**

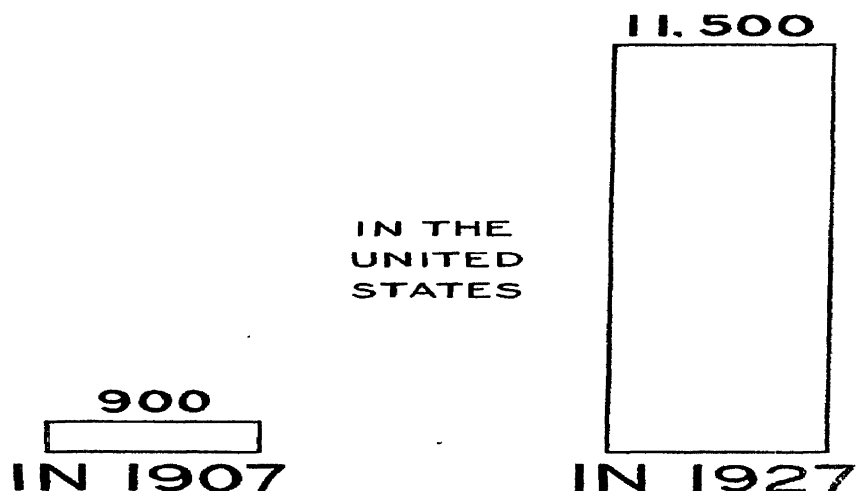
PER CENT OF POPULATION WITHIN THE  
**BIRTH REGISTRATION AREA**  
OF THE UNITED STATES



STATES WITH  
**CHILD HYGIENE DIVISIONS**  
(OR THEIR EQUIVALENT)



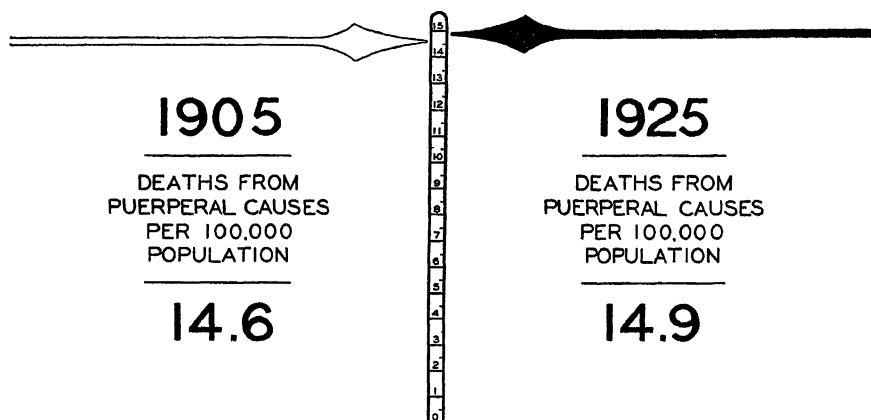
# PUBLIC HEALTH NURSES



## COUNTIES WITH WHOLE TIME HEALTH OFFICERS

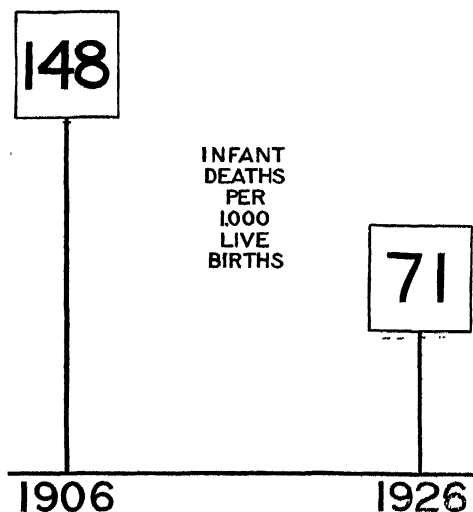


# MATERNAL MORTALITY



UNITED STATES DEATH REGISTRATION AREA

## INFANT MORTALITY



UNITED STATES DEATH REGISTRATION AREA

As truly comparable figures for these two periods are lacking, approximate comparison is secured by using data for U. S. Death Registration Area in 1906, and provisional U. S. Census rate for 68 cities in 1926.

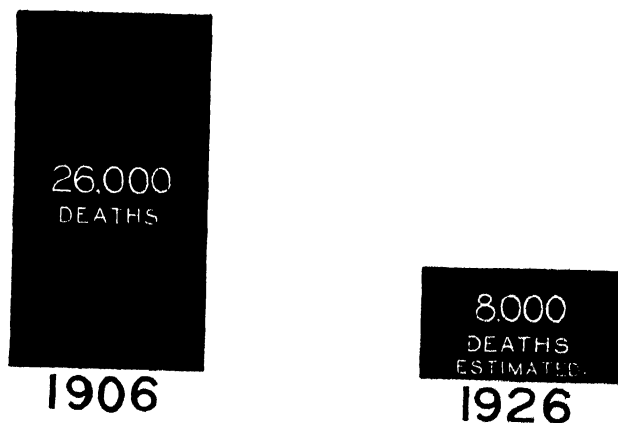


# EXPECTATION OF LIFE AT BIRTH IN THE UNITED STATES



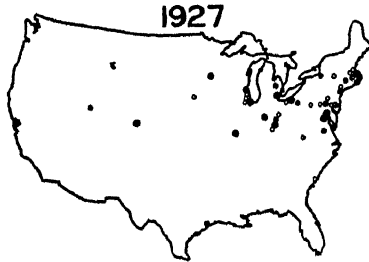
(ESTIMATED FIGURES)

# DIPHTHERIA DEATHS PER 100,000,000 POPULATION IN THE UNITED STATES



# MILK PASTEURIZATION

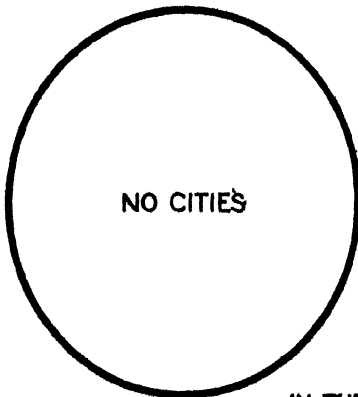
1907  
NO CITIES



CITIES OF: • OVER 250,000 POPULATION, • 100,000 to 250,000, • LESS THAN 100,000

CITIES OF THE UNITED STATES  
HAVING A MILK SUPPLY 95 PER CENT (OR OVER) PASTEURIZED

# CHLORINATION OF DRINKING WATER



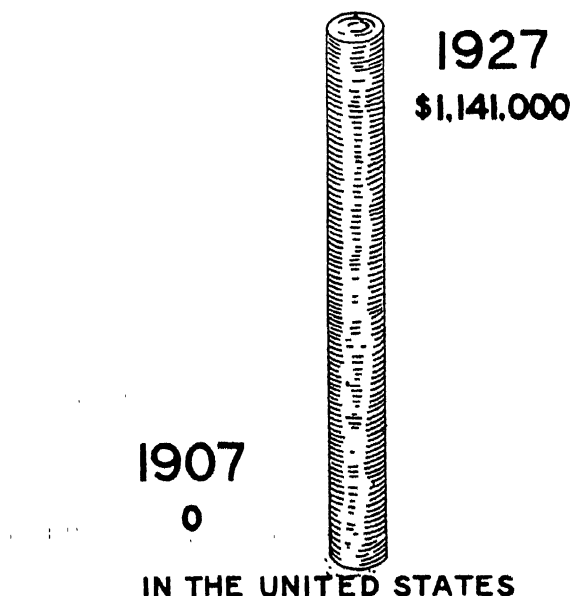
1906



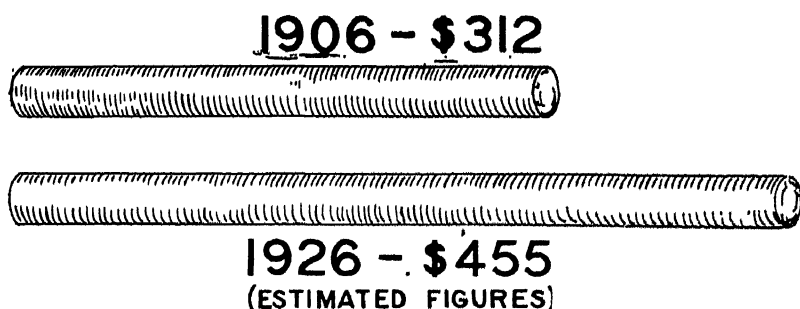
CITIES  
IN THE UNITED STATES  
50,000 POPULATION  
AND OVER

1926

## FEDERAL EXPENDITURES FOR CHILD HEALTH WORK



## ANNUAL CURRENT INCOME PER CAPITA IN THE UNITED STATES (1913 DOLLARS)



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**CHARTS PREPARED BY THE  
DIVISION OF HEALTH EDUCATION  
OF THE  
AMERICAN CHILD HEALTH ASSOCIATION**

**SCHOOL HEALTH ACTIVITIES**

**PROTECTION**



**MEDICAL INSPECTION 1906**



**MEDICAL EXAMINATION 1926**

SCHOOL HEALTH ACTIVITIES  
INSTRUCTION

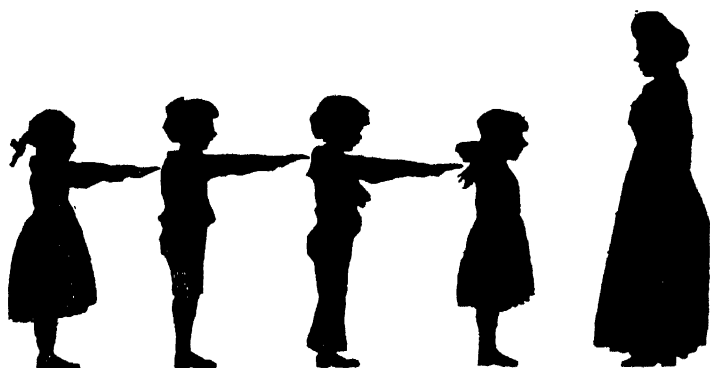


**HYGIENE LESSON 1906**



**HYGIENE LESSON 1926**

SCHOOL HEALTH ACTIVITIES  
PROMOTION



**READY FOR RECREATION 1906**



**READY FOR RECREATION 1926**

*Silhouettes by Emily Lansingh*

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**AMERICAN CHILD HEALTH ASSOCIATION  
FOURTH ANNUAL MEETING  
BUSINESS SESSION**



# AMERICAN CHILD HEALTH ASSOCIATION

## Fourth Annual Meeting

### BUSINESS SESSION

NEW YORK CITY, OCTOBER 14, 1926

The Fourth Annual Business Meeting of the American Child Health Association was held in the library of the general offices of the Association, Room 1722, 370 Seventh Avenue, New York City, Friday, October 15, 1926, at 10:00 A.M. In the absence of the President, Mr. Herbert Hoover, the Vice-President, Livingston Farrand, M.D., presided.

I. The minutes of the last annual meeting having been mimeographed and sent to the membership, on motion it was VOTED

THAT the minutes of the last annual business meeting be approved as mimeographed, and their reading omitted.

II. The Treasurer's report was then presented by Mr. Edward M. Flesh, Treasurer, and by unanimous consent approved as read and ordered placed on file. The report was as follows:

"I am submitting herewith my report on the financial operations of the American Child Health Association for the period ending September 30, 1926, together with an estimate of cash requirements for the last quarter ending December 31, 1926, and the funds available to meet these requirements.

It is gratifying to note that, in savings effected through the practice of economies, the Association shows an under-budget expenditure of \$39,106.59 for the nine months' period under review.

Budget authorized for the Year of 1926 plus Special Appropriations, \$306,120.00.

Undisbursed Income, January 1, 1926.....\$ 27,437.16

*Receipts*

A. R. A. Children's Fund, Inc.....	\$110,550.00	
Laura Spelman Rockefeller Memorial..	37,500.00	
Carnegie Corporation of New York...	5,000.00	
Cleveland Community Fund.....	60.00	
Individuals . . . . .	350.00	
Other Income: Memberships and Refunds . . . . .	19,481.35	172,941.35
		<u>\$200,378.51</u>

*Disbursements*

Budget expenditures to September 30, 1926 . . . . .	\$190,483.41	
Non-budget expenditures		
Return of over-payment to Laura Spelman Rockefeller Memorial (Year 1925) . . . . .	\$4,894.55	
Sundry items, not budgeted	1,013.52	5,908.07
		<u>\$196,391.48</u>
Estimated requirements for three months ending December 31, 1926 based on average monthly requirements for past nine months, \$21,164.83 monthly . . . . .		<u>\$ 63,494.46</u>

*Funds Available*

Cash on hand, September 30, 1926....	\$ 3,987.03	
Laura Spelman Rockefeller Memorial, final contribution (received October 3, 1926) . . . . .	12,500.00	
Estimated miscellaneous receipts, Mem- berships, Publications, etc. . . . .	2,500.00	\$ 18,987.03
		<u>44,507.43</u>
Balance to be furnished . . . . .		<u>\$ 63,494.46</u>

Funds covering this balance will be supplied by the A. R. A. Children's Fund, Inc., under its guarantee of budget.

(Signed) EDW. M. FLESH,  
Treasurer,  
American Child Health Association."

III. The Secretary of the Association, Philip Van Ingen, M.D., then submitted his annual report, which by unanimous consent was approved as read and ordered placed on file.

The report is as follows:

A summary of the more important matters upon which Executive Committee action has been taken since the last Annual Meeting is herewith submitted.

It was voted, "that the Executive Committee accept the request of the Board of Directors regarding the securing of adequate funds for the Joint Committee on Maternal Welfare, and that the Budget Committee be requested to ascertain how and where the funds can be secured."

It was also voted, "that Howard Carpenter, M.D., be requested to continue to represent the American Child Health Association on the Advisory Committee of the United States Children's Bureau, Department of Labor, Washington, D. C."

The Executive Committee appointed the following Program Committee for the Atlantic City American Health Congress:

Philip Van Ingen, M.D., Chairman, Mary Gardner, R.N., Samuel McClintock Hamill, M.D., Merrill E. Champion, M.D., E. J. Huene-kens, M.D., Mary Murphy.

At the February 26, 1926, meeting of the Executive Committee the tentative plan for a School Health Study as proposed by the President, Mr. Herbert Hoover, was presented and upon motion it was voted, "that we approve in principle the tentative plan presented and that the preliminary steps for making the study should go forward as rapidly as consistent with thorough scientific work and the efficient carrying on of the regular work of the Association, but that additional expenses incident to the proposed School Health Study should not

exceed \$25,000 for the current year, subject to the approval of the Finance Committee."

There being a vacancy on the Executive Committee, upon motion it was voted, "that Mrs. Mary Swartz Rose, Ph.D., be elected a member of the Executive Committee, and that she be appointed as Chairman of the Technical Sub-committee on Nutrition."

An invitation was received from the National Conference on Street and Highway Safety to appoint a representative to their conference in Washington, March 23rd to 25th. The President appointed Mrs. Root as American Child Health Association representative to this Conference.

As a result, the idea of observing Safety Day in all the large cities of the United States on May Day—Child Health Day was adopted. It is important to record but one death of a child by accident in the large cities of the country on May 1st, as against an average of 18 per day.

The matter of funds for the Joint Committee on Maternal Welfare, of which Fred L. Adair, M.D., is chairman was discussed. The opinion was unanimous that the committee should be given as generous support as possible. It was, therefore, on motion voted "that the American Child Health Association appropriate the sum of \$500 to the Joint Committee on Maternal Welfare, to be paid as requisitioned by the Joint Committee. It was understood that this appropriation did not necessarily preclude further requests from the Committee, the granting of which would depend upon the ability of the Association to make further appropriations."

At the Executive Committee Meeting held June 4, 1926, the following recommendations contained in the report of the General Executive were discussed and upon motion it was voted that "the General Executive be authorized to send out announcements to the affiliated agencies and members of the Association, that it seemed desirable, unless there was contrary opinion from those who usually attend the meetings, that the annual scientific meeting of the American Child Health Association be held in May. The General Executive so notified all the members of the organization by circular letter. The replies, giving expression relative to the change, are as follows: 76 in favor of May, 16 indifferent, and 10 prefer another time. It was voted,

“That the General Executive be authorized to accept the invitation from the Provincial Health Officer to conduct a Clean and Safe Milk Campaign in the Province of Saskatchewan, Canada.”

Reports of the General Executive show satisfactory progress in the work of the various Divisions of the Association with large reductions in the expenditures for carrying on the work.

(Signed) PHILIP VAN INGEN, M.D.,  
Secretary.”

IV. The Nominating Committee reported the following names as being recommended for election to the 1931 class of Board of Directors:

S. Josephine Baker, M.D.	Horace Morison
George Barr Baker	J. Prentice Murphy
H. E. Barnard, Ph.D.	Herbert Houston
Julius Barnes	Lawrence T. Royster, M.D.
S. Lillian Clayton, R.N.	Bernard Sachs, M.D.
Thomas D. Cooley, M.D.	C.-E. A. Winslow, Dr.P.H.
Clinton H. Crane	Richard M. Smith, M.D.
Victor G. Heiser, M.D.	Felix Warburg

On motion duly made, the secretary was instructed to cast a ballot for the names as submitted by the Nominating Committee. The secretary reported he had cast a vote for the persons nominated and they were declared elected.

V. The General Executive then submitted his report for the year and after a brief discussion it was VOTED

THAT the report \* of the General Executive be accepted with thanks.

No further business appearing the meeting adjourned.

PHILIP VAN INGEN, M.D.  
Secretary.

\* The Fourth Annual Report of the General Executive, Doctor Crumbine, as presented at this meeting, was issued as a supplement to the November, 1926, issue of the *Child Health Bulletin*, the official publication of the American Child Health Association. Doctor Crumbine's account of the work of the Association to date appears on pages 10 to 21 of these *Transactions* of the 1927 Annual Meeting.

# American Child Health Association

370 Seventh Avenue, New York City

## OFFICERS

HERBERT HOOVER, *President*

LIVINGSTON FARRAND, M.D., *Vice-President*

THOMAS D. WOOD, M.D., *Vice-President*

MRS. A. H. REEVE, *Vice-President*

PHILIP VAN INGEN, M.D., *Secretary*

EDWARD M. FLESH, *Treasurer*

ARNOLD GESELL, M.D., *Vice-President*

## BOARD OF DIRECTORS AND EXECUTIVE COMMITTEE MEMBERS

\*Grace Abbott  
Fred L. Adair, M.D.  
S. Josephine Baker, M.D.  
\*George Barr Baker  
H. E. Barnard, Ph.D.  
\*Julius Barnes  
Mrs. Nicholas F. Brady  
Harvey J. Burkhardt, D.D.S.  
Merrill E. Champion, M.D.  
A. J. Chesley, M.D.  
Taliaferro Clark, M.D.  
S. Lillian Clayton, R.N.  
Thomas B. Cooley, M.D.  
\*Clinton H. Crane  
Thomas R. Crowder, M.D.  
Hugh S. Cumming, M.D.  
Laurence R. DeBuys, M.D.  
Louis I. Dublin, Ph.D.  
\*Livingston Farrand, M.D.  
John H. Finley  
\*Edward M. Flesh  
Homer Folks  
John A. Foote, M.D.  
Lee K. Frankel, Ph.D.  
Mary Gardner, R.N.

Arnold Gesell, M.D.  
Clifford G. Grulec, M.D.  
\*Samuel McC. Hamill, M.D.  
Victor G. Heiser, M.D.  
Henry F. Helmholz, M.D.  
Christian A. Herter  
\*Herbert Hoover  
\*Herbert S. Houston  
E. J. Huenekens, M.D.  
Albert H. Jewell  
J. H. Mason Knox, Jr., M.D.  
Gertrude Lane  
William Palmer Lucas, M.D.  
Helen MacMurchy, M.D.  
E. V. McCollum, Ph.D.  
\*Mrs. William B. Meloney  
Horace Morison  
J. Prentice Murphy  
Frank C. Neff, M.D.  
Mrs. Maud Wood Park  
Angelo Patri  
Frederick Peterson, M.D.  
\*Edgar Rickard  
Mrs. A. H. Reeve  
\*Mary Swartz Rose, Ph.D.

Lawrence T. Royster, M.D.  
Bernard Sachs, M.D.  
Henry L. K. Shaw, M.D.  
Richard M. Smith, M.D.  
Margaret K. Stack, R.N.  
Frederick D. Stricker, M.D.  
Corcoran Thom  
E. L. Thorndike, Ph.D.  
\*Philip Van Ingen, M.D.  
Henry F. Vaughan, Dr. P.H.  
Borden S. Veeder, M.D.  
\*Marguerite Wales, R.N.  
Joseph S. Wall, M.D.  
\*Felix Warburg  
Allen Wardwell  
Florence Wardwell  
William H. Welch, M.D.  
Ray L. Wilbur, M.D.  
Herbert B. Wilcox, M.D.  
Charl O. Williams  
\*Linsly R. Williams, M.D.  
C.-E. A. Winslow, Dr. P.H.  
William Wirt, Ph.D.  
\*Thomas D. Wood, M.D.  
William C. Woodward, M.D.

\* Executive Committee

## STAFF

(As of October 1, 1927)

S. J. CRUMBINE, M.D., *General Executive  
and Director, Division of Public Health Relations*  
ANNE L. WHITNEY, *Acting Director, Division of Health Education*  
GEORGE T. PALMER, Dr. P.H., *Director, Division of Research*  
AIDA de ACOSTA BRECKINRIDGE, *Director  
Division of Publications and Promotion*  
LEROY A. WILKES, M.D., *Director  
Division of Medical Service*

## STAFF ASSOCIATES

ELLEN C. BARBITT  
CHARLES F. CHRISMAN  
MARGARET M. EDWARDS  
HOWARD R. ESTES  
KATHERINE GLOVER  
IONE F. HARTFORD

CLARA E. HAYES, M.D.  
ANNA HEISLER, R.N.  
DOROTHY HOLLAND, Ph.D.  
ALICE F. LOOMIS  
HELEN GUTHRIE MILLER  
LUCY OFFEN

ETHEL PERRIN  
HAZEL RISTEEN  
AMY P. TAPPING  
GRACE TURNER  
WILLIAM F. WILD, M.D.

















